EAST Search History

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L2	0	WO-2006009465-$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 16:28
L3	0	EP-1773397-$.did.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 16:28
L4	0	("2007015795").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/26 16:37
L5	1	("20070015795").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/26 16:44
L6	1	("20070009608").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/26 16:44
L7	123	polar adj head.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 17:07
L8	85	polar adj head adj group.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 17:08
L9	145	lipid adj compound.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 17:08
L10	2	l8 and L9	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 17:08
L11	17	((ROLF) near2 (BERGE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/06/26 17:08
S15	161	((ANDREW) near2 (MILLER)).INV.	USPAT	OR	ON	2007/06/19 08:25
S16	292	((ANDREW) near2 (MILLER)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:28

EAST Search History

S17	128	((ANDREW) near2 (MILLER)).INV.	EPO; JPO; DERWENT	OR	ON	2006/11/16 09:28
S18	7	((MICHAEL) near2 (JORGENSEN)).INV.	EPO; JPO; DERWENT	OR	ON	2006/11/16 09:28
S19	12	((ROLF) near2 (BERGE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/06/20 09:55
S20	9	((ROLF) near2 (BERGE)).INV.	EPO; JPO; DERWENT	OR	ON	2006/11/16 09:29
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S22	12	((ROLF) near2 (BERGE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:29
S23	1	((JON) near2 (SKORVE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:30
S24	1	((JON) near2 (SKORVE)).INV.	EPO; JPO; DERWENT	OR	ON	2006/11/16 09:30
S25	3604	"514/54".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:41
S26	2078	S25 and @ad<="20020620"	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 12:37
S27	226	S26 and phospholipid	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 11:44
S28	5	S27 and sulfur-containing	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:43
S29	57	S27 and sulfur	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 09:43
S31	1163	"536/53".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 11:42
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S33	87	S32 and phospholipid	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/16 12:08

EAST Search History

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S49	7	("5399353").URPN.	USPAT	OR	ON	2007/06/19 08:41
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S66	148	((ANDREW) near2 (MILLER)).INV.	EPO; JPO; DERWENT	OR	ON	2007/06/20 09:56
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S68	15	((ROLF) near2 (BERGE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/06/20 09:56
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S72	1	((JON) near2 (SKORVE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/06/20 09:56
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S75	71	S74 and sulfur	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/20 09:59
S76	486	S64 or S65 or S66 or S67 or S68 or S69 or S70 or S71 or S72 or S73 and phospholipid	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/25 17:23

EAST Search History

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S81	1	("20020188023").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/20 10:48
S82	145	lipid adj compound.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/25 17:23
S83	114	phg.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/26 17:07
S84	2	S82 and S83	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2007/06/25 17:24

HW 6/26/07

FILE 'REGISTRY' ENTERED AT 15:36:55 ON 22 JUN 2007
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DICTIONARY FILE UPDATES: 21 JUN 2007 HIGHEST RN 938223-21-3

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http://www.cas.org/support/stngen/stndoc/properties.html

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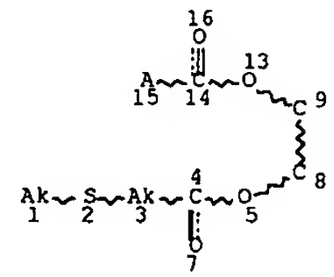

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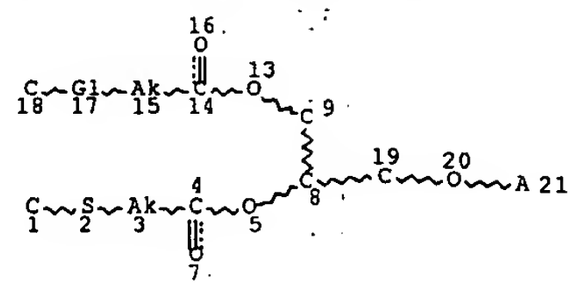

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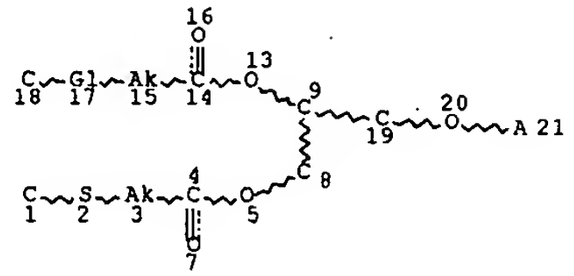

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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE
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L6 41 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND P=>1

Compds. w/ at least one phosphorous

FILE 'CAPLUS' ENTERED AT 15:36:55 ON 22 JUN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 22 Jun 2007 VOL 147 ISS 1
FILE LAST UPDATED: 21 Jun 2007 (20070621/ED)

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L7 16 L6

=> sel hit l7 1-16 rn
E1 THROUGH E41 ASSIGNED

L7 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:79367 CAPLUS Full-text
DOCUMENT NUMBER: 144:156766
TITLE: Composition comprising plant, fish oils and non-oxidizable fatty acid entities and pharmaceutical or nutritional uses thereof
INVENTOR(S): Berge, Rolf
PATENT ASSIGNEE(S): Thia Medica AS, Norway
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006009464	A2	20060126	WO 2005-NO271	20050719
WO 2006009464	A3	20060824		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
NO 2004003091	A	20060120	NO 2004-3091	20040719
NO 2004003093	A	20060120	NO 2004-3093	20040719
NO 2004005544	A	20060619	NO 2004-5544	20041217
AU 2005264781	A1	20060126	AU 2005-264781	20050719
CA 2574366	A1	20060126	CA 2005-2574366	20050719
EP 1784223	A2	20070516	EP 2005-772164	20050719
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US 2007009608	A1	20070111	US 2006-550129	20060509
PRIORITY APPLN. INFO.:			NO 2004-3091 A	20040719
			NO 2004-3093 A	20040719
			NO 2004-5544 A	20041217
			WO 2005-NO271 W	20050719

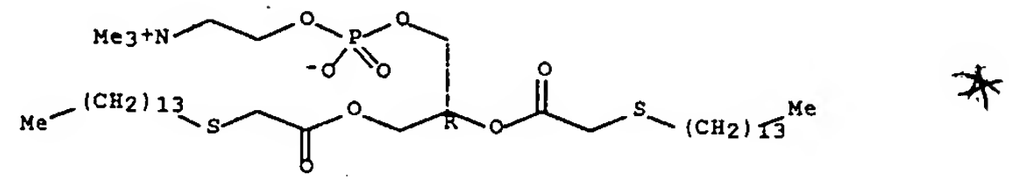
OTHER SOURCE(S): MARPAT 144:156766

AB The present invention concerns a composition prepared from a combination of plant oil and/or fish oil and a compound comprising non β-oxidizable fatty acid analogs, and the use of said composition for the preparation of a pharmaceutical or nutritional composition for the prevention and/or treatment of insulin resistance, obesity, diabetes, fatty liver, hypercholesterolemia, dyslipidemia, atherosclerosis, coronary heart disease, thrombosis, stenosis, secondary stenosis, myocardial infarction, stroke, elevated blood pressure, endothelial dysfunction, procoagulant state, polycystic ovary syndrome, the metabolic syndrome, cancer, inflammatory disorders and proliferate skin disorders. The present invention also concerns an animal feed prepared from a combination of plant oil and/or fish oil and a compound comprising non β-oxidizable fatty acid analogs, the use of said feed for improving the body composition of an animal, and a product produced from said animal.

IT 636589-28-1
RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(composition comprising plant, fish oils and non-oxidizable fatty acid entities and its pharmaceutical or nutritional uses thereof)

RN 636589-28-1 CAPLUS
CN 3,5,9-Trioxa-12-thia-4-phosphahexacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[(tetradecylthio)acetyl]oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:75330 CAPLUS Full-text
DOCUMENT NUMBER: 144:156735
TITLE: Composition containing protein material and compounds comprising non-oxidizable fatty acid entities
INVENTOR(S): Berge, Rolf
PATENT ASSIGNEE(S): Thia Medica AS, Norway
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006009465	A2	20060126	WO 2005-NO272	20050719
WO 2006009465	A3	20060914		
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US 2007015795	A1	20070118	US 2006-550033	20060509

PRIORITY APPLN. INFO.:		
NO 2004-3091	A	20040719
NO 2004-3093	A	20040719
NO 2004-5544	A	20041217
WO 2005-NO272	W	20050719

OTHER SOURCE(S): MARPAT 144:156735

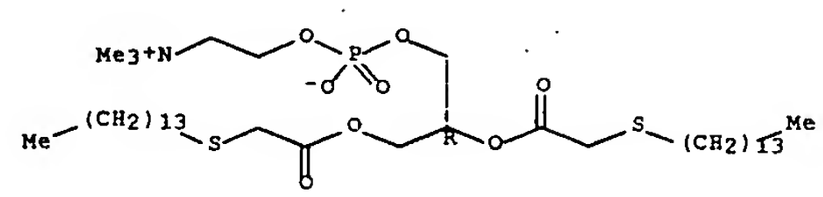
AB The present invention concerns a composition prepared from a combination of non-β-oxidizable fatty acid entities and a protein material, and the use of said composition for the preparation of a pharmaceutical or nutritional composition for the prevention and/or treatment of insulin resistance, obesity, diabetes, fatty liver, hypercholesterolemia, dyslipidemia, atherosclerosis, coronary heart disease, thrombosis, stenosis, secondary stenosis, myocardial infarction, stroke, elevated blood pressure, endothelial dysfunction, procoagulant state, polycystic ovary syndrome, the metabolic syndrome, cancer, inflammatory disorders and proliferate skin disorders. An alternative embodiment of the invention includes oil in the composition The present invention also concerns an animal feed prepared from a combination of a protein material and a compound comprising non-β-oxidizable fatty acid analogs, the use of said feed for improving the body composition of an animal, and a product produced from said animal.

IT 636589-28-1
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(composition containing protein and non-oxidizable fatty acid entities for prevention and treatment of metabolic disorders and improvement of animal-based products)

RN 636589-28-1 CAPLUS

CN 3,5,9-Trioxa-12-thia-4-phosphahexacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[(tetradecylthio)acetyl]oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2004:121684 CAPLUS Full-text
DOCUMENT NUMBER:	140:327017
TITLE:	Engineered Lipids That Cross-Link the Inner and Outer Leaflets of Lipid Bilayers
AUTHOR(S):	Halter, Michael; Nogata, Yoichi; Dannenberger, Oliver; Sasaki, Tomikazu; Vogel, Viola
CORPORATE SOURCE:	Center for Nanotechnology, Departments of Bioengineering and Chemistry, University of Washington, Seattle, WA, 98195, USA
SOURCE:	Langmuir (2004), 20(6), 2416-2423 CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER:	American Chemical Society
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 140:327017

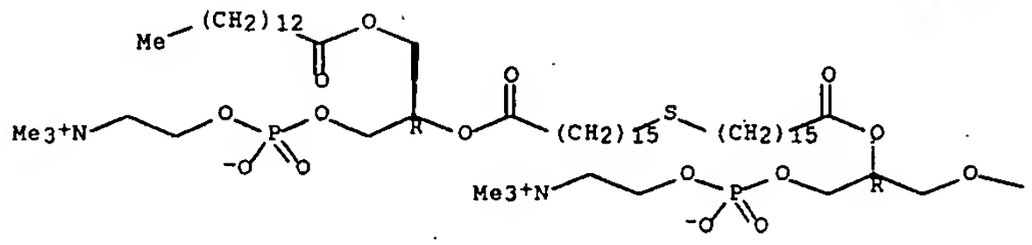
AB The application of supported lipid bilayer systems as mol. sensors, diagnostic devices, and medical implants is limited by their lack of stability. In an effort to enhance the stability of supported lipid bilayers, three pairs of phosphatidylcholine lipids were designed to cross-link at the termini of their 2-position acyl chain upon the formation of lipid bilayers. The crosslinked lipids span the lipid bilayer, resembling naturally occurring bola-amphiphiles that stabilize archaebacterial membranes against high temps. The three reactions investigated here include the acyl chain crosslinking between thiol and bromine groups, thiol and acryloyl groups, and cyclopentadiene and acryloyl groups. All three reactive lipid pairs were found to cross-link in liposomal membranes, as determined by thin-layer chromatog., ion-spray mass spectrometry, and 1H NMR. The monolayer film properties of the reactive amphiphiles were characterized by surface pressure-area isotherms and showed that stable monolayers formed at the air-water interface with limiting mol. areas comparable to that of pure saturated phosphatidylcholine lipids. Langmuir-Blodgett bilayers of dimyristoylphosphatidylcholine incorporating 15 mol % of the reactive thiol and acryloyl lipids had diffusion coeffs. comparable with pure dimyristoylphosphatidylcholine, while bilayers with more than 25 mol % of the reactive lipids were immobile, suggesting that interleaflet crosslinking of the lipids inhibited membrane diffusion. Our results show that the reactive lipids can cross-link within a lipid bilayer and are suitable for assembling supported lipid bilayers using Langmuir-Blodgett deposition. By using terminally reactive amphiphiles to build up supported lipid bilayers with crosslinked leaflets, bola-amphiphiles can be incorporated into asym. solid supported membranes to increase their stability in biosensor and medical implant applications.

IT 678139-86-1P 678139-88-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(engineered lipids that crosslink the inner and outer leaflets of lipid bilayers)

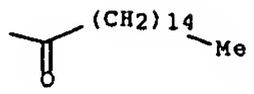
RN 678139-86-1 CAPLUS
CN 3,5,8,42,45,47-Hexaoxa-25-thia-4,46-diphosphanonatetracontane-1,49-diaminium, 4,46-dihydroxy-N,N,N,N',N',N'-hexamethyl-9,41-dioxo-7-[[(1-oxohexadecyl)oxy]methyl]-43-[[(1-oxotetradecyl)oxy]methyl]-, bis(inner salt), 4,46-dioxide, (7R,43R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



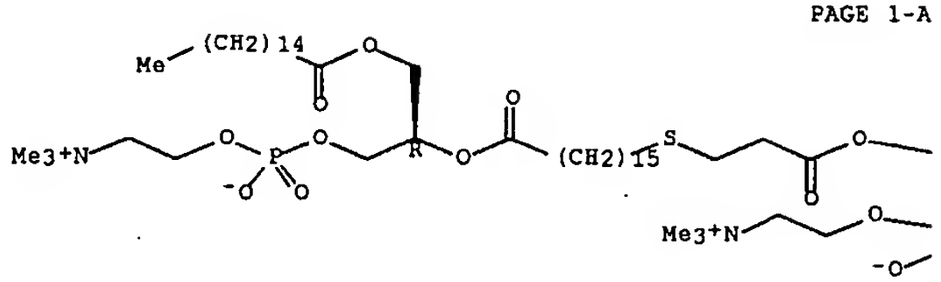
PAGE 1-B



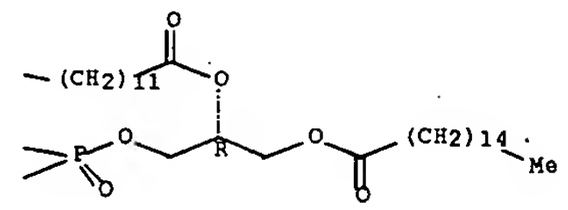
RN 678139-88-3 CAPLUS
CN 3,5,8,21,42,45,47-Heptaoxa-25-thia-4,46-diphosphanonatetracontane-1,49-diaminium, 4,46-dihydroxy-N,N,N,N',N',N'-hexamethyl-9,22,41-trioxo-7,43-bis[[(1-oxohexadecyl)oxy]methyl]-, bis(inner salt), 4,46-dioxide, (7R,43R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

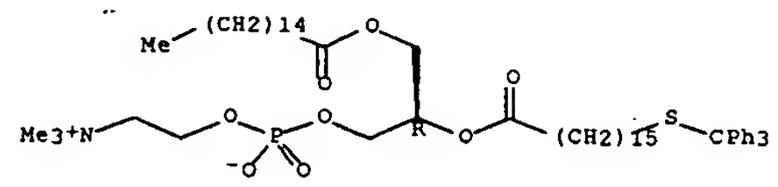


PAGE 1-B



IT 678139-84-9P 678139-87-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(engineered lipids that crosslink the inner and outer leaflets of lipid bilayers)
RN 678139-84-9 CAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[1-oxo-16-[(triphenylmethyl)thio]hexadecyl]oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

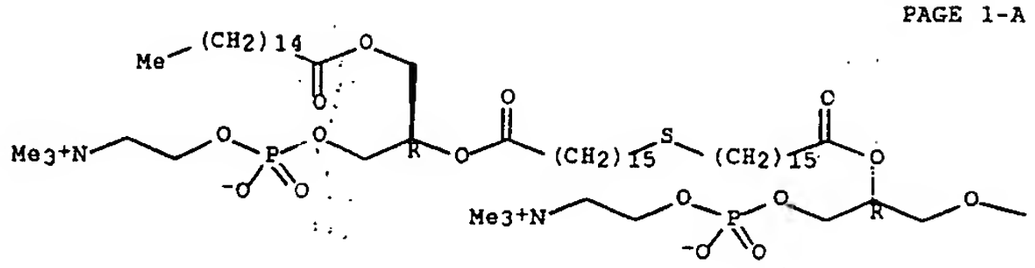
Absolute stereochemistry.



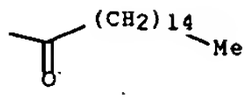
RN 678139-87-2 CAPLUS
CN 3,5,8,42,45,47-Hexaoxa-25-thia-4,46-diphosphanonatetracontane-1,49-diaminium, 4,46-dihydroxy-N,N,N,N',N',N'-hexamethyl-9,41-dioxo-7,43-bis[[(1-oxohexadecyl)oxy]methyl]-, bis(inner salt), 4,46-dioxide, (7R,43R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

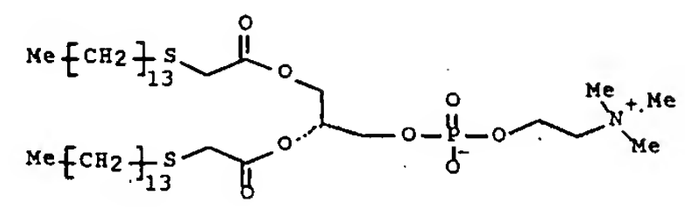
L7 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:2894 CAPLUS Full-text
DOCUMENT NUMBER: 140:42422
TITLE: Preparation of sulfur-containing phospholipid triglyceride derivatives as antidiabetic agents
INVENTOR(S): Miller, Andrew David; Jorgensen, Michael Rael; Berge, Rolf; Skorve, Jon
PATENT ASSIGNEE(S): Ic Vec Limited, UK; Thia Medica As
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000854	A1	20031231	WO 2003-GB2582	20030616
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2490121	A1	20031231	CA 2003-2490121	20030616
AU 2003278602	A1	20040106	AU 2003-278602	20030616
EP 1515978	A1	20050323	EP 2003-740736	20030616
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1675229	A	20050928	CN 2003-817434	20030616
JP 2005529969	T	20051006	JP 2004-515006	20030616
NZ 537762	A	20070223	NZ 2003-537762	20030616
IN 2004CN02846	A	20060210	IN 2004-CN2846	20041215
NO 2004005562	A	20050217	NO 2004-5562	20041220
ZA 2005000558	A	20051017	ZA 2005-558	20050120
US 2006105987	A1	20060518	US 2005-518427	20050930

PRIORITY APPLN. INFO.: GB 2002-14267 A 20020620

GB 2002-17506 A 20020729
WO 2003-GB2582 W 20030616

OTHER SOURCE(S): MARPAT 140:42422
GI



I

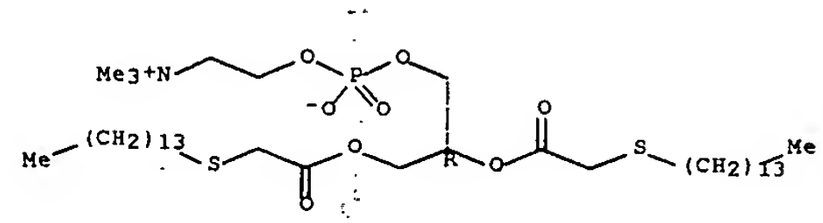
AB The present invention provides a lipid compound comprising at least one non-polar moiety and a polar moiety, wherein each or at least one non-polar moiety is of the formula X-Y-Z-, wherein X is a hydrocarbyl chain, Y is selected from at least one of S, Se, SO2, SO, and O, and Z is an optional hydrocarbyl group, wherein the polar moiety is of the formula -[C(O)]mPHG, wherein PHG is a polar head group, and wherein m is the number of non-polar moieties. Thus, esterified tetradecylthioacetic acid (TTA) phosphatidylcholines (PCs) and triacylglycerides (TAGs), e.g. I, were prepared Effect of esterified and non-esterified TTA on palmitoyl-CoA oxidation in rat liver homogenate. Effect of esterified and non-esterified TTA on the mitochondrial carnitine palmitoyltransferase-II activity. Effect of esterified and non-esterified TTA on the 3-hydroxy-3-methylglutharyl- CoA synthase activity in rat liver homogenate. Effect of esterified and non-esterified TTA on the fatty acyl-CoA oxidase activity in rat liver homogenate. Effect of esterified and non-esterified TTA containing liposomes on plasma lipids in male Wistar rats. The compds. of the present invention (TTA-PC and TTA-TAG) have been demonstrated to increase fatty acid oxidation and decrease plasma and hepatic lipid levels.

IT 636589-28-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of sulfur-containing phospholipid triglyceride derivs. as antidiabetic agents)

RN 636589-28-1 CAPLUS

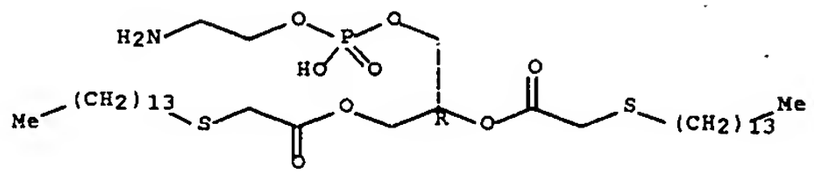
CN 3,5,9-Trioxa-12-thia-4-phosphahexacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[(tetradecylthio)acetyl]oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 636589-31-6P 636589-32-7P 636589-33-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfur-containing phospholipid triglyceride derivs. as antidiabetic agents)
RN 636589-31-6 CAPLUS
CN Acetic acid, (tetradecylthio)-, (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

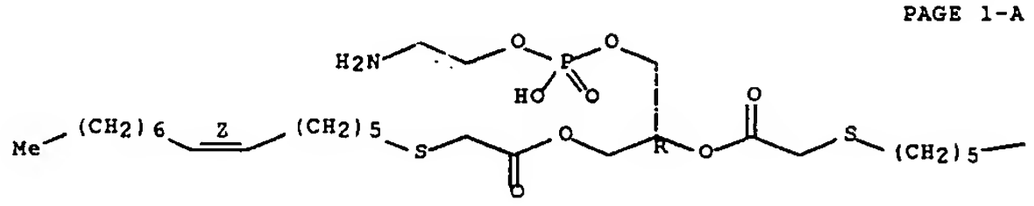
Absolute stereochemistry.



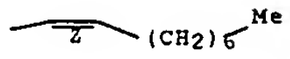
RN 636589-32-7 CAPLUS
CN Acetic acid, [(6Z)-6-tetradecenylthio]-, (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



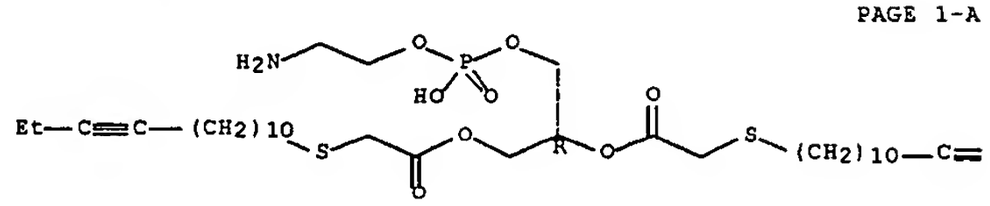
PAGE 1-B



RN 636589-33-8 CAPLUS
CN Acetic acid, (11-tetradecynylthio)-, (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

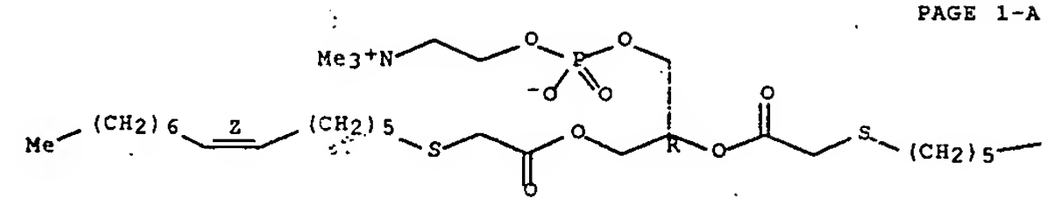


PAGE 1-B

IT 636589-29-2P 636589-30-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of sulfur-containing phospholipid triglyceride derivs. as antidiabetic agents)
RN 636589-29-2 CAPLUS
CN 3,5,9-Trioxa-12-thia-4-phosphahexacos-18-en-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[[(6Z)-6-tetradecenylthio]acetyl]oxy]-, inner salt, 4-oxide, (7R,18Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



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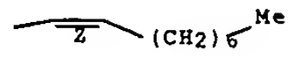
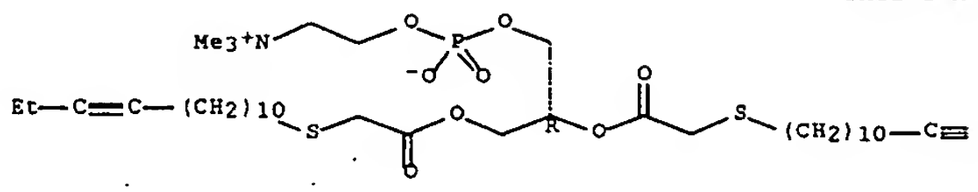


RN 636589-30-5 CAPLUS
CN 3,5,9-Trioxa-12-thia-4-phosphahexacos-23-yn-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[(11-tetradecynylthio)acetyl]oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:189315 CAPLUS Full-text
DOCUMENT NUMBER: 139:133726
TITLE: A chemoenzymatic route to quasisymmetrical chiral sulfoxides and their phospholipid derivatives
AUTHOR(S): Hodgson, Derek; Buist, Peter H.
CORPORATE SOURCE: Department of Chemistry, Carleton University, Ottawa, ON, K1S 5B6, Can.
SOURCE: Tetrahedron: Asymmetry (2003), 14(6), 641-644
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:133726

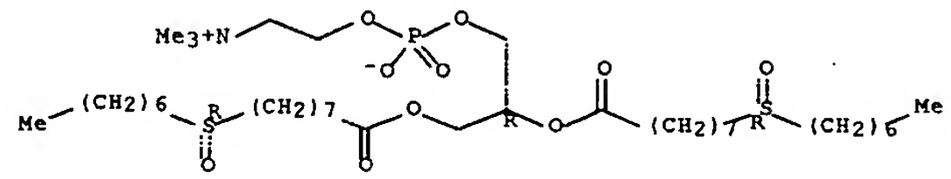
AB The chain-length dependence of yeast Δ9 desaturase-mediated sulfoxidn. was examined Me (R)-9-thiahexadecanoate S-oxide (95% ee) and the corresponding phosphatidylcholine diester was synthesized.

IT 566170-58-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(chemoenzymic preparation of quasisym. chiral sulfoxides and their phospholipid derivs. via bakers yeast mediated sulfoxidn.)

RN 566170-58-9 CAPLUS

CN 3,5,9-Trioxa-18-thia-4-phosphapentacosan-1-aminium, 7-[[8-[(R)-heptylsulfinyl]-1-oxooctyl]oxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4,18-dioxide, (7R,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:634613 CAPLUS Full-text
DOCUMENT NUMBER: 138:35002
TITLE: Origin of membrane dipole potential: Contribution of the phospholipid fatty acid chains
AUTHOR(S): Peterson, Uwe; Mannock, David A.; Lewis, Ruthven N. A. H.; Pohl, Peter; McElhaney, Ronald N.; Pohl, Elena E.
CORPORATE SOURCE: Institut fur Medizinische Physik und Biophysik, Martin-Luther-Universitat, Halle, 06097, Germany
SOURCE: Chemistry and Physics of Lipids (2002), 117(1-2), 19-27
CODEN: CPLIA4; ISSN: 0009-3084
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

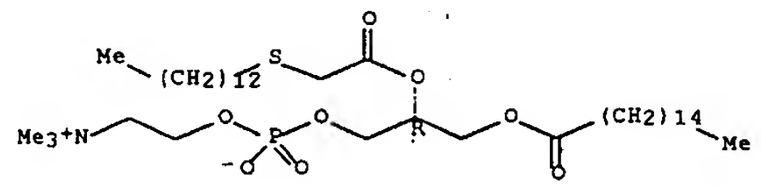
AB The large intrinsic membrane dipole potential, Φd, is important for protein insertion and functioning as well as for ion transport across natural and model membranes. However, the origin of Φd is controversial. From expts. carried out with lipid monolayers, a significant dependence on the fatty acid chain length is suggested, whereas in expts. with lipid bilayers, the contribution of addnl. -CH2-groups seems negligibly small compared with that of the phospholipid carbonyl groups and lipid-bound water mols. To compare the impact of the -CH2-groups of dipalmitoylphosphatidylcholine (DPPC) near and far from the glycerol backbone, the authors have varied the structure of DPPC by incorporation of sulfur atoms in place of methylene groups in different positions of the fatty acid chain. The Φd of sym. lipid bilayers containing one heteroatom was obtained from the charge relaxation of oppositely charged hydrophobic ions. The authors have found that the substitution for a S-atom of a -CH2-group decreases Φd. The effect (ΔΦd= -22.6 mV) is most pronounced for S-atoms near the lipid head group while a S-atom substitution in the C13- or C14-position of the hydrocarbon chain does not effect the bilayer dipole potential. Most probably ΔΦd does not originate from an altered dipole potential of the acyl chain containing an heteroatom but is mediated by the disruption of chain packing, leading to a decreased d. of lipid dipoles in the membrane.

IT 478690-35-6 478690-37-8 478690-39-0
478690-41-4 478690-43-6
RL: PRP (Properties)
(phospholipid fatty acid chain methylene groups effect on membrane dipole potential)

RN 478690-35-6 CAPLUS

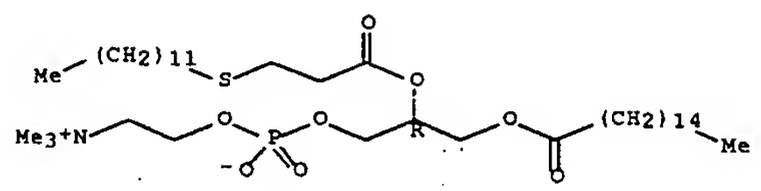
CN 3,5,8-Trioxa-11-thia-4-phosphatetracosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxohexadecyl)oxy]methyl]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



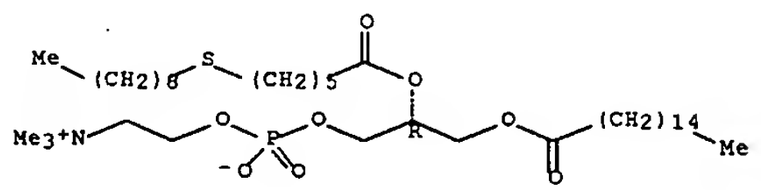
RN 478690-37-8 CAPLUS
CN 3,5,8-Trioxa-12-thia-4-phosphatetracosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxohexadecyl)oxy]methyl]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



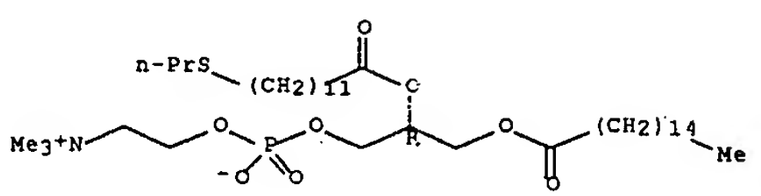
RN 478690-39-0 CAPLUS
CN 3,5,8-Trioxa-15-thia-4-phosphatetracosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxohexadecyl)oxy]methyl]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



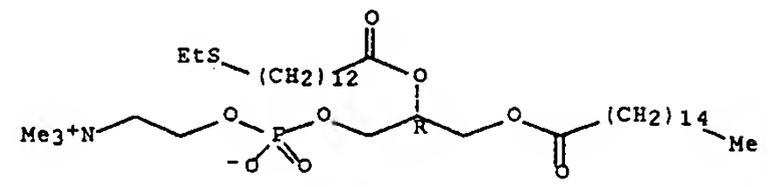
RN 478690-41-4 CAPLUS
CN 3,5,8-Trioxa-21-thia-4-phosphatetracosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxohexadecyl)oxy]methyl]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



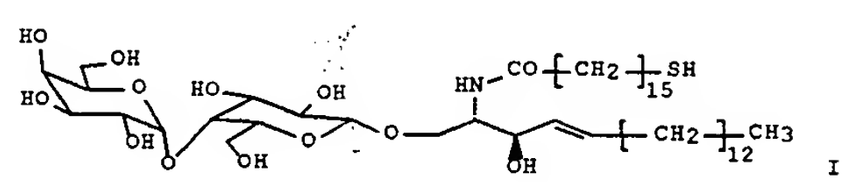
RN 478690-43-6 CAPLUS
CN 3,5,8-Trioxa-22-thia-4-phosphatetracosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxohexadecyl)oxy]methyl]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:180690 CAPLUS Full-text
DOCUMENT NUMBER: 130:252555
TITLE: ω-Mercapto analogs of naturally occurring lipids
AUTHOR(S): Ohlsson, Jorgen; Magnusson, Goran
CORPORATE SOURCE: Organic chemistry 2, Center for Chemistry and Chemical Engineering, Lund University, Lund, SE-221 00, Swed.
SOURCE: Tetrahedron Letters (1999), 40(10), 2011-2014
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



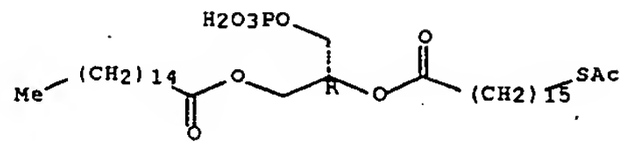
AB Analogs of natural lipids, where one of the alkyl chains carries a terminal thiol functionality, were prepared by N- or O-acylation of sphingosine or monoacylglycerol derivs., resp., thus creating lipid mimics, e.g. I, suitable for anchoring to gold surfaces.

IT 221623-70-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of ω-mercapto analogs of naturally occurring lipids and glycolipids)

RN 221623-70-7 CAPLUS
CN Hexadecanoic acid, 16-(acetylthio)-, (1R)-1-[[(1-oxohexadecyl)oxy]methyl]-2-(phosphonooxy)ethyl ester (9CI) (CA INDEX

NAME)

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

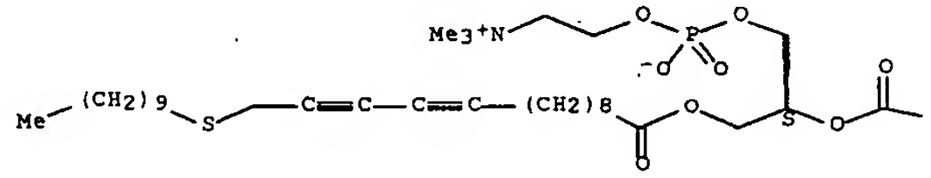
L7 ANSWER 8 OF 16 CAPLUS. COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:692877 CAPLUS Full-text
DOCUMENT NUMBER: 126:47447
TITLE: Microstructure formation properties of 1,2-bis(15-thia-pentacosa-10,12-diynoyl)-sn-3-phosphocholine: an acyl chain modified diacetylenic phospholipid
AUTHOR(S): Markowitz, Michael A.; Singh, Alok
CORPORATE SOURCE: Laboratory for Molecular Interfacial Interactions, Code 6930, Center for Bio/Molecular Science and Engineering, Naval Research Laboratory, Washington, USA
SOURCE: Chemistry and Physics of Lipids (1996), 84(1), 65-74
CODEN: CPLIA4; ISSN: 0009-3084
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An acyl chain modified diacetylenic phospholipid containing a sulfur beta to the diacetylene, 1,2-bis(15-thia-pentacosa-10,12-diynoyl)-sn-3-phosphocholine, was synthesized. Comparisons of the UV spectra of the lipid, the diacetylenic carboxylic acid precursor, and the unmodified diacetylenic lipid 1,2-bis(tricosa-10,12-diynoyl)-sn-3-phosphocholine reveal that the sulfur acts as an auxochrome resulting in bathochromic shifts and higher intensities for the absorption peaks. Differential scanning calorimetry was used to determine the acyl chain melting transition temps. of 1,2-bis(15-thia-pentacosa-10,12-diynoyl)-sn-3- phosphocholine in water (31.2°C) and 70:30 ethanol:water mixture (28.7°C) and revealed that the lipid packed more homogeneously in the ethanol:water mixture Subsequent dispersal of the lipid in water produced ribbons with diams. ranging from 0.01-0.1 μm while dispersal in 70:30 ethanol:water leads to formation of tubules with diams. ranging from 0.6-0.8 μm. A gel comprised of interwoven ribbons was formed from an equimolar mixture of the lipid and 1,2-bis(nonoyl)-sn-glycero-3-phosphocholine (DNPC) in 0.1 M aqueous NaCl.

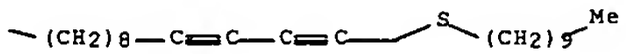
IT 185059-68-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(microstructure formation properties of bis(thiapentacosadiynoyl)phosphocholine)
RN 185059-68-1 CAPLUS
CN 3,5,9-Trioxa-24-thia-4-phosphatetratriaconta-19,21-diyn-1-aminium, 7-[[14-(decylthio)-1-oxo-10,12-tetradecadiynyl]oxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

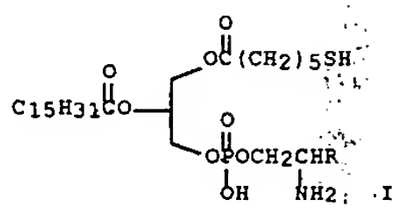
PAGE 1-A



PAGE 1-B



L7 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:502549 CAPLUS Full-text
DOCUMENT NUMBER: 123:56493
TITLE: Synthesis of glycerophospholipid oligodeoxyribonucleotide conjugates
AUTHOR(S): Vinogradov, Serguei V.; Le Doan, Trung; Helene, Claude
CORPORATE SOURCE: Centre Biophysique Moleculaire, CNRS, Orleans, 45071, Fr.
SOURCE: Tetrahedron Letters (1995), 36(14), 2493-6
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



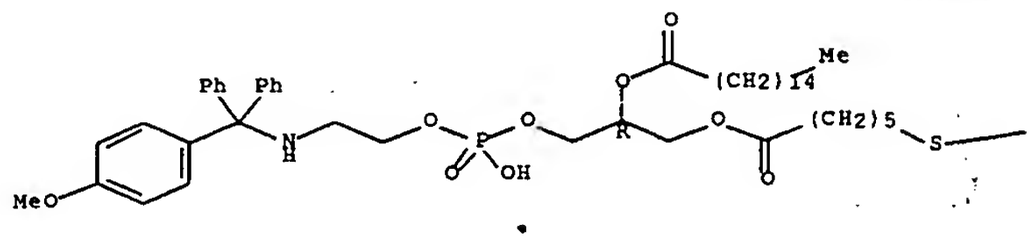
AB Chemical synthesis of modified glycerophospholipids I (R = H, CO2H) and their attachment to oligodeoxyribonucleotides via dithio linker is described.

IT 164733-08-8P 164733-09-9P 164733-10-2P
164733-11-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of glycerophospholipid dithio-linked oligodeoxyribonucleotide conjugates)

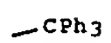
RN 164733-08-8 CAPLUS
CN Hexadecanoic acid, 4-hydroxy-9-(4-methoxyphenyl)-4-oxido-1-[[[1-oxo-6-[(triphenylmethyl)thio]hexyl]oxy]methyl]-9,9-diphenyl-3,5-dioxa-8-aza-4-phosphanon-1-yl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



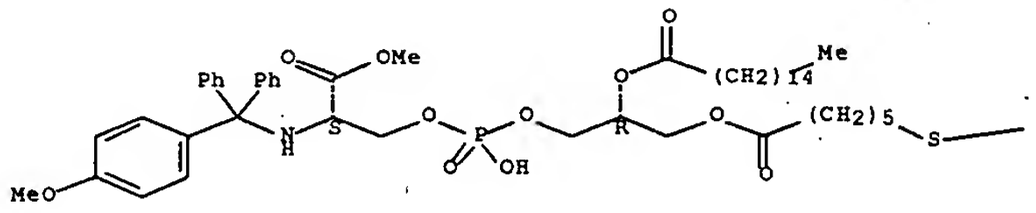
PAGE 1-B



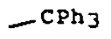
RN 164733-09-9 CAPLUS
CN 9,13,15-Trioxa-2-thia-14-phosphaoctadecan-18-oic acid, 14-hydroxy-17-[[(4-methoxyphenyl)diphenylmethyl]amino]-8-oxo-11-[(1-oxohexadecyl)oxy]-1,1,1-triphenyl-, methyl ester, 14-oxide, [R-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



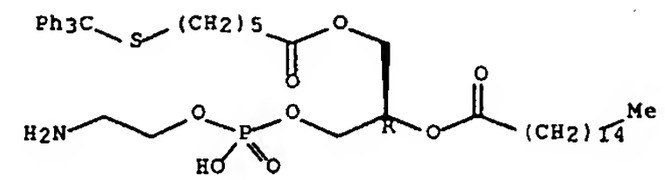
PAGE 1-B



RN 164733-10-2 CAPLUS

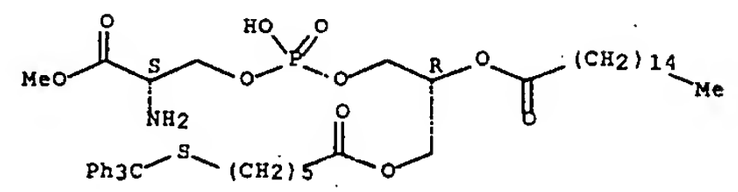
CN Hexadecanoic acid, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[[1-oxo-6-[(triphenylmethyl)thio]hexyl]oxy]ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

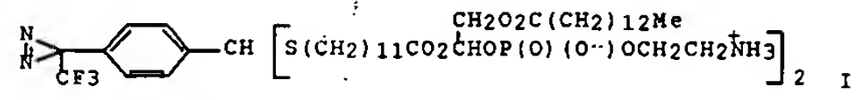


RN 164733-11-3 CAPLUS
CN 9,13,15-Trioxa-2-thia-14-phosphaoctadecan-18-oic acid, 17-amino-14-hydroxy-8-oxo-11-[(1-oxohexadecyl)oxy]-1,1,1-triphenyl-, methyl ester, 14-oxide, [R-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:490647 CAPLUS Full-text
DOCUMENT NUMBER: 119:90647
TITLE: Design, synthesis, and properties of a photoactivatable membrane-spanning phospholipidic probe
AUTHOR(S): Delfino, Jose M.; Schreiber, Stuart L.; Richards, Frederic M.
CORPORATE SOURCE: Dep. Mol. Biophys. Biochem., Yale Univ., New Haven, CT, 06511, USA
SOURCE: Journal of the American Chemical Society (1993), 115(9), 3458-74
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB A new photochem. probe suitable for labeling deep into the hydrophobic core of membranes is described: bisphosphatidylethanolamine(trifluorom

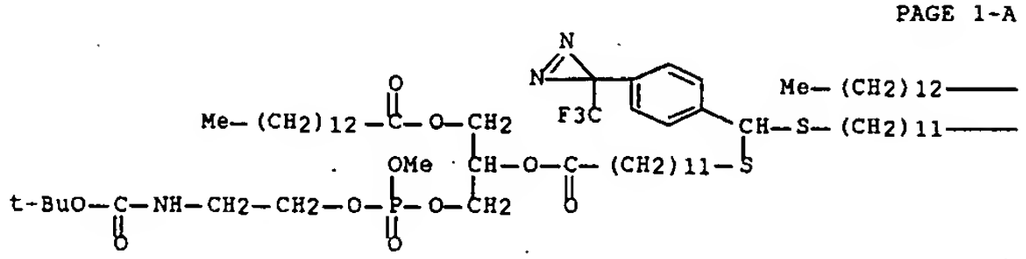
ethyl)phenyldiazirine (I). This is a dipolar phospholipid provided with a covalently bonded chain designed to span the membrane and equipped with a centrally defined attachment point for the photolabeling group (trifluoromethyl)phenyldiazirine (TPD). This mol. was designed to enhance the geometrical resolution of photochem. labeling of membrane proteins by locating the photoreactive functionality in the center of the bilayer. The remarkable chemical stability of the photoreactive group TPD allowed the design of a straightforward and convergent synthetic strategy. The key steps developed for mols. of this new general kind are (a) the mild and efficient coupling of 2 moieties of N-tBOC-protected lysophosphatidylethanolamine Me ester to the photoreactive sym. dicarboxylic fatty acid mediated by dicyclohexylcarbodiimide and (dimethylamino)pyridine and (b) the smooth deprotection of the phosphate and amino functionalities with sodium iodide and trifluoroacetic acid, resp., to yield the final product. I was successfully incorporated into small and large unilamellar vesicles of different lipid composition and prepared by a variety of procedures. The bilayer location of this reagent (transmembrane vs U-shaped conformations) was assayed by reaction of the amino groups at the polar heads of the bipolar phospholipid with selected membrane-impermeable reagents. Photolysis of the probe incorporated into vesicles occurs readily upon irradiation with UV light (near 360 nm). These loaded vesicles show adequate stability and appear uniform and unilamellar in electron micrographs. They undergo the fusion reaction with influenza virus as efficiently as reagent-free vesicles. Evidence is presented here that I and a reductively methylated form efficiently label the peptide ion channel form of gramicidin A (and a chemical analog) and the influenza virus hemagglutinin. I may help to identify transmembrane regions of integral membrane proteins and map the lipid-protein interface in a region known to be deep in the membrane. A new radioactive version of this reagent ([3H]-I has been recently used to ascertain that the HA2 subunit of influenza virus hemagglutinin inserts into the target membrane prior to fusion.

IT 149183-58-4P 149203-93-0P
RL: PREP (Preparation)
(preparation and demethylation from phosphotriester group with sodium iodide of)

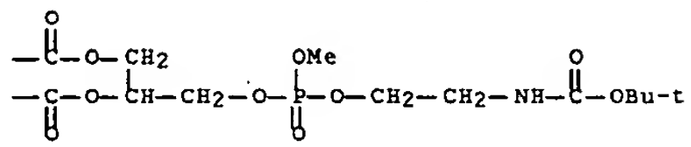
RN 149183-58-4 CAPLUS

CN 5,7,10,38,41,43-Hexaoxa-23,25-dithia-2,46-diaza-6,42-diphosphaheptatetracontanedioic acid, 6,42-dimethoxy-11,37-dioxo-9,39-bis[[(1-oxotridecyl)oxy]methyl]-24-[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]-, bis(1,1-dimethylethyl) ester, 6,42-dioxide, [9R-(9R*,39R*)]- (9CI) (CA INDEX NAME)

PAGE 1-A



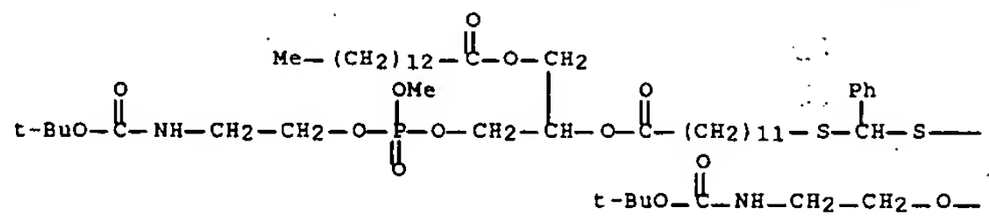
PAGE 1-B



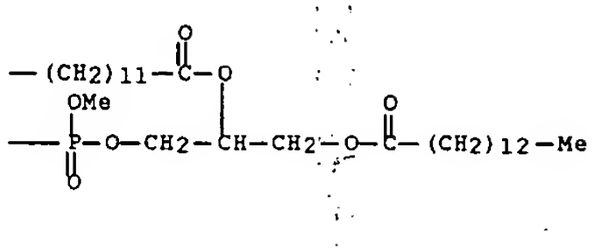
RN 149203-93-0 CAPLUS

CN 5,7,10,38,41,43-Hexaoxa-23,25-dithia-2,46-diaza-6,42-diphosphaheptatetracontanedioic acid, 6,42-dimethoxy-11,37-dioxo-9,39-bis[[(1-oxotetradecyl)oxy]methyl]-24-phenyl-, bis(1,1-dimethylethyl) ester, 6,42-dioxide, [9R-(9R*,39R*)]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



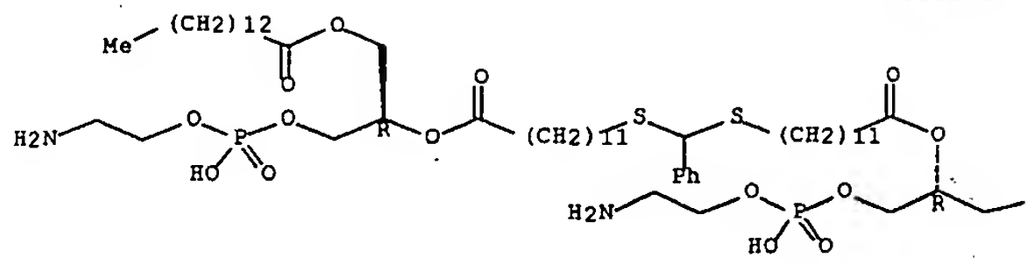
IT 113297-40-8P 149203-95-2P
RL: PREP (Preparation)
(preparation and properties, as membrane-spanning phospholipd probe)

RN 113297-40-8 CAPLUS

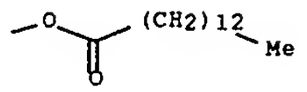
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



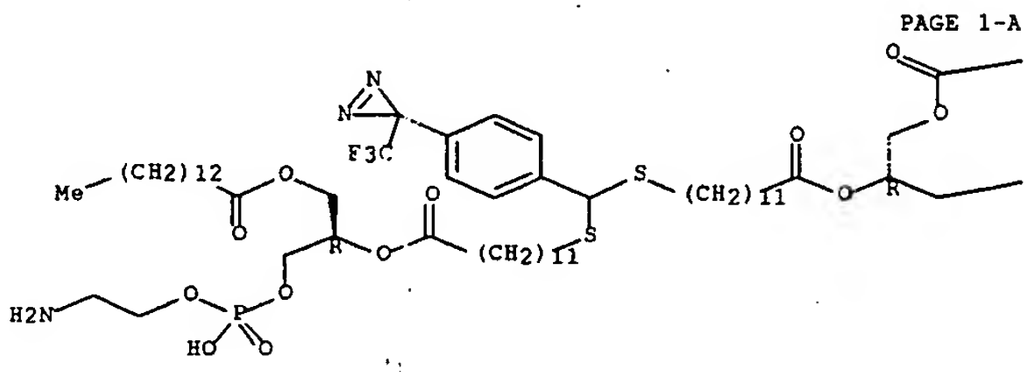
PAGE 1-B



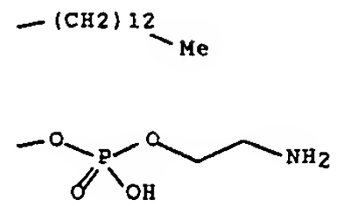
RN 149203-95-2 CAPLUS
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



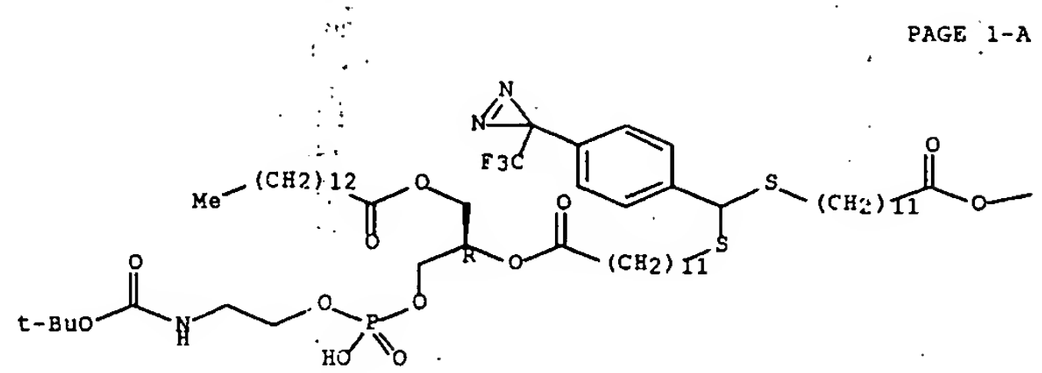
PAGE 1-B



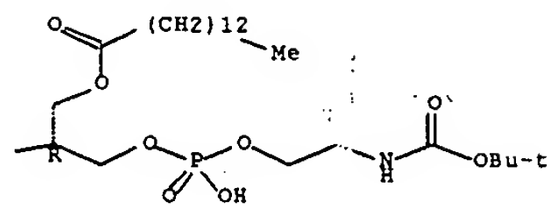
IT 149203-94-1P 149226-61-9P
RL: PREP (Preparation)
(preparation of and tertiary butoxycarbonyl group removal from)
RN 149203-94-1 CAPLUS
CN 5,7,10,38,41,43-Hexaoxa-23,25-dithia-6,42-diphosphaheptatetracontanedioic acid, 6,42-dihydroxy-9,39-bis[[(1-oxotetradecyl)oxy]methyl]-24-[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]-, bis(1,1-dimethylethyl) ester, 6,42-dioxide, [R-(R*,R*)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



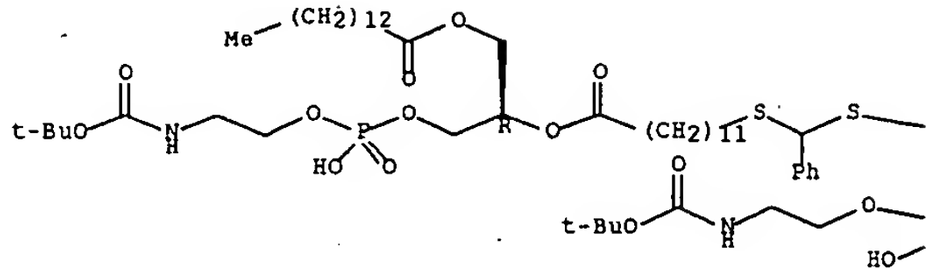
PAGE 1-B



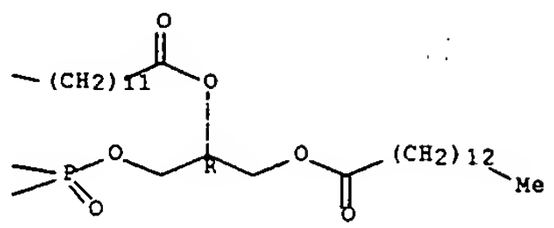
RN 149226-61-9 CAPLUS
CN 5,7,10,38,41,43-Hexaoxa-23,25-dithia-2,46-diaza-6,42-diphosphaheptatetracontanedioic acid, 6,42-dihydroxy-11,37-dioxo-9,39-bis[[(1-oxotetradecyl)oxy]methyl]-24-phenyl-, bis(1,1-dimethylethyl) ester, 6,42-dioxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



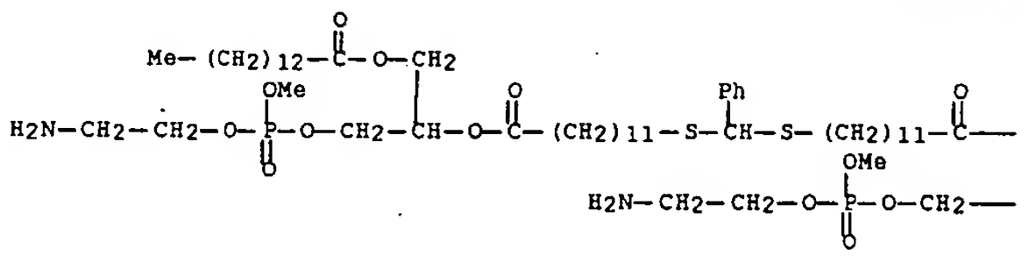
PAGE 1-B



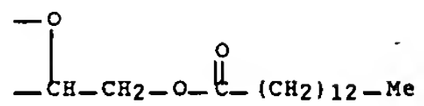
IT 149204-00-2P 149204-01-3P 149204-02-4P
RL: PREP (Preparation)
(preparation of, photoactivatable bisphosphatidylethanolamine phenyldiazirine derivative as membrane-spanning probe in relation to)

RN 149204-00-2 CAPLUS
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-methoxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-, 1-[[[(2-aminoethoxy)methoxyphosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [7R-[7R*,35(1R*)]]- (9CI) (CA INDEX NAME)

PAGE 1-A



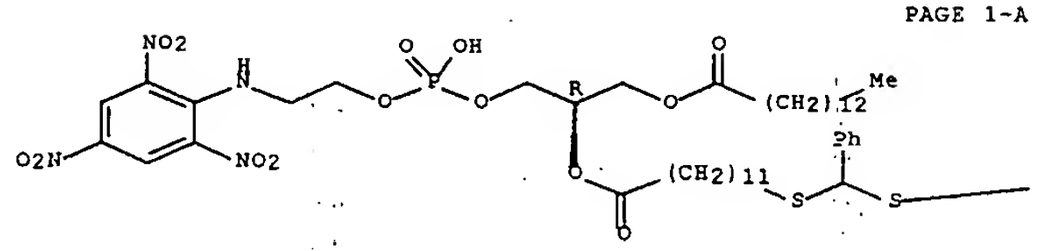
PAGE 1-B



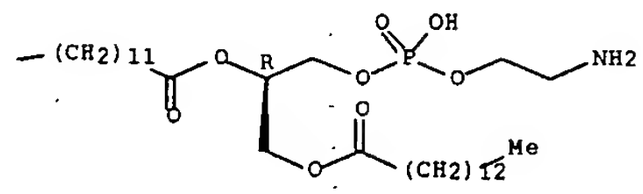
RN 149204-01-3 CAPLUS
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-, 1-[[[hydroxy[2-[(2,4,6-trinitrophenyl)amino]ethoxy]phosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



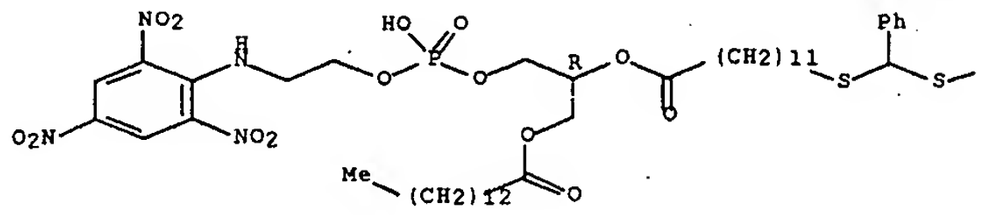
PAGE 1-B



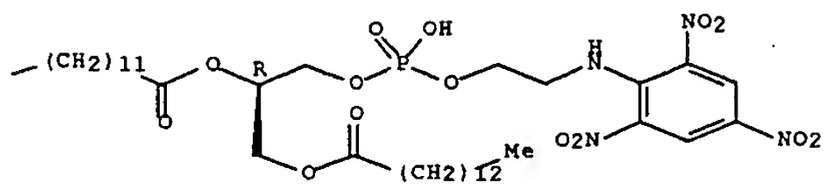
RN 149204-02-4 CAPLUS
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-1-[(2,4,6-trinitrophenyl)amino]-, 1-[[[hydroxy[2-[(2,4,6-trinitrophenyl)amino]ethoxy]phosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

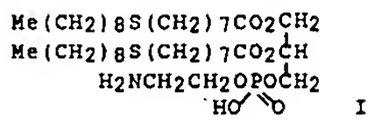
PAGE 1-A



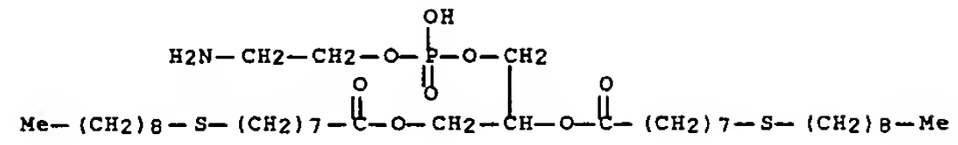
PAGE 1-B



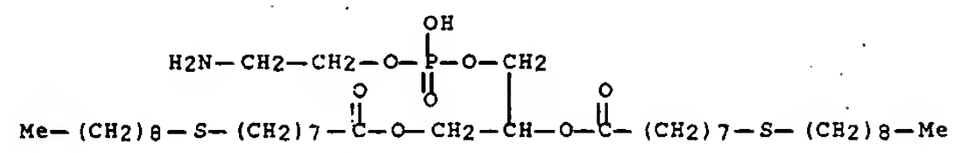
L7 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:449085 CAPLUS Full-text
DOCUMENT NUMBER: 119:49085
TITLE: Synthesis of sulfur-substituted phosphatidylethanolamines and inhibition of protozoan cyclopropane fatty acid synthase
AUTHOR(S): Li, Ruoxin; Ganguli, Shovan; Pascal, Robert A., Jr.
CORPORATE SOURCE: Dep. Chem., Princeton Univ., Princeton, NJ, 08544, USA
SOURCE: Tetrahedron Letters (1993), 34(8), 1279-82
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



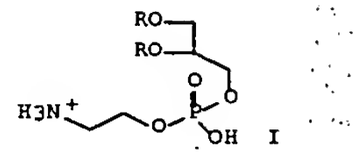
AB The phosphatidylethanolamine I was prepared by chemical synthesis. I and its mono-S-Me derivative inhibit the cyclopropane fatty acid synthase from the parasitic protozoan Crithidia fasciculata.
IT 148693-65-6DP, mono-S-Me derivative 148693-65-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and inhibition by, of cyclopropane fatty acid synthetase)
RN 148693-65-6 CAPLUS
CN Octanoic acid, 8-(nonylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



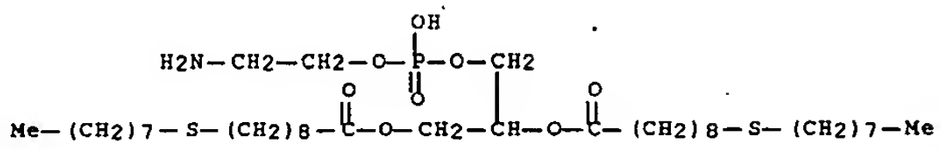
RN 148693-65-6 CAPLUS
CN Octanoic acid, 8-(nonylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



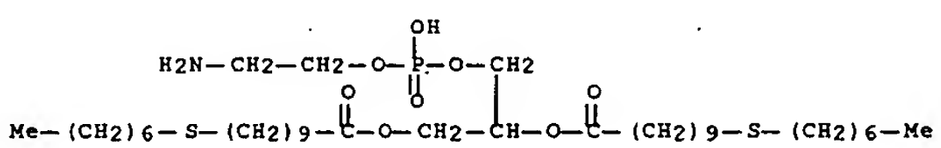
L7 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:192131 CAPLUS Full-text
DOCUMENT NUMBER: 118:192131
TITLE: Sulfur-substituted phosphatidylethanolamines
AUTHOR(S): Li, Ruoxin; Pascal, Robert A., Jr.
CORPORATE SOURCE: Dep. Chem., Princeton Univ., Princeton, NJ, 08544, USA
SOURCE: Journal of Organic Chemistry (1993), 58(7), 1952-4
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



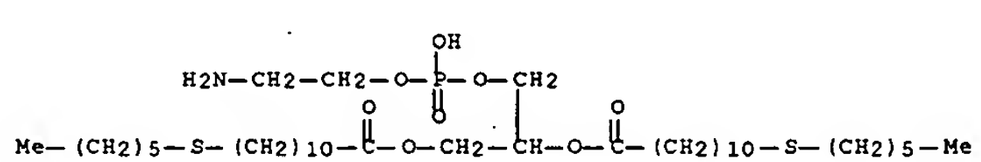
AB Title compds, e.g. I (R = 9-, 10-, 11-, 12-thiastearoyl) were prepared from O1,O2-isopropylideneglycerol in 7 steps.
IT 147071-25-8P 147071-26-9P 147071-27-0P
148693-65-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 147071-25-8 CAPLUS
CN Nonanoic acid, 9-(octylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



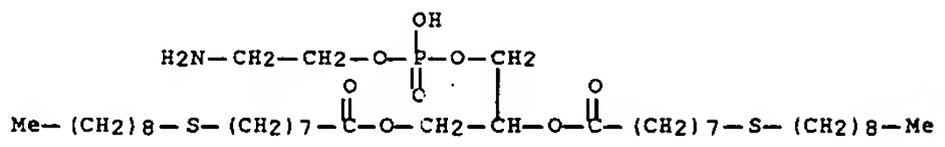
RN 147071-26-9 CAPLUS
CN Decanoic acid, 10-(heptylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



RN 147071-27-0 CAPLUS
CN Undecanoic acid, 11-(hexylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



RN 148693-65-6 CAPLUS
CN Octanoic acid, 8-(nonylthio)-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



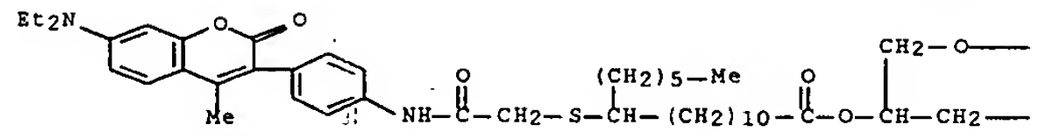
L7 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:420466 CAPLUS Full-text
DOCUMENT NUMBER: 113:20466
TITLE: Interactions of mammalian cells with lipid dispersions containing novel metabolizable cationic amphiphiles
AUTHOR(S): Leventis, Rania; Silvius, John R.
CORPORATE SOURCE: Dep. Biochem., McGill Univ., Montreal, QC, H3G 1Y6, Can.

SOURCE: Biochimica et Biophysica Acta, Biomembranes (1990), 1023(1), 124-32
CODEN: BBBMBS; ISSN: 0005-2736
DOCUMENT TYPE: Journal
LANGUAGE: English

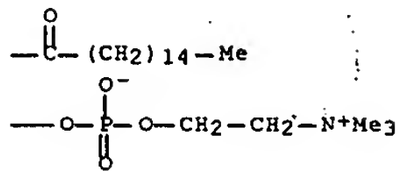
AB Several novel cationic amphiphiles, based on a hydrophobic cholesteryl or dioleoylglyceryl moiety, have been prepared whose hydrophobic and cationic portions are linked by ester bonds to facilitate efficient degradation in animal cells. Dispersions combining such cationic species with phosphatidylethanolamine (PE), certain structural analogs of PE or diacylglycerol can mediate efficient transfer of both nonexchangeable lipid probes and the DNA plasmid pSV2cat into cultured mammalian (CV-1 and 3T3) cells. The abilities of different types of cationic lipid dispersions to mediate transfection of mammalian cells with pSV2cat could not be directly correlated with their abilities to coalesce with other membranes, as assessed by their ability to intermix lipids efficiently with large unilamellar phosphatidylcholine/phosphatidylserine vesicles in the presence or absence of DNA. The cytotoxicities toward CV-1 cells of dispersions combining PE with most of the degradable cationic amphiphiles studied here compare favorably with those reported previously for similar dispersions containing other types of cationic amphiphiles. Fluorescent analogs of 2 of the diacylglycerol-based cationic amphiphiles examined in this study are readily degraded after incorporation into CV-1 cells from PE/cationic lipid dispersions.

IT 108535-71-3
RL: ANST (Analytical study)
(palmitoylstearolylglycerol derivative and homostearoyl phosphatidylcholine derivative preparation from)
RN 108535-71-3 CAPLUS
CN 3,5,8-Trioxa-21-thia-4-phosphatricosan-1-aminium, 23-[[4-[7-(diethylamino)-4-methyl-2-oxo-2H-1-benzopyran-3-yl]phenyl]amino]-20-hexyl-4-hydroxy-N,N,N-trimethyl-9,23-dioxo-7-[[(1-oxo-1-hexadecyl)oxy]methyl]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L7 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:167843 CAPLUS Full-text
DOCUMENT NUMBER: 108:167843
TITLE: An efficient method for the partial synthesis of

	mixed-chain phosphatidylethanolamines
AUTHOR(S):	Delfino, Jose M.; Schreiber, Stuart L.; Richards, Frederic M.
CORPORATE SOURCE:	Sterling Chem. Lab., Yale Univ., New Haven, CT, 06520, USA
SOURCE:	Tetrahedron Letters (1987), 28(21), 2327-30 CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 108:167843

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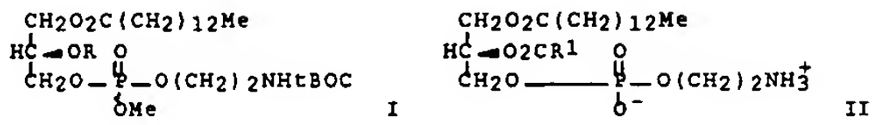

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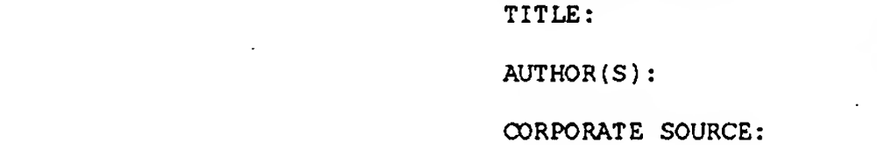


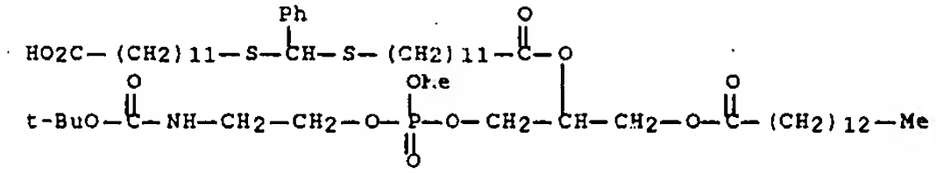
II

AB A key step in the title synthesis was the acylation of myristoyllysophosphatidylethanolamine I (R = H) with R1CO2H [R1 = (CH2)3Me, (CH2)12Me, (CH2)12CO2H, Z-(CH2)7CH:CH(CH2)7Me, Z,Z-(CH2)7CH:CHCH2CH:CH(CH2)4Me] in the presence of DCC and DMAP to give 79-84% esters I (R = R1CO). The latter were deprotected with NaI in 2-butanone followed by CF3CO2H in CH2Cl2 to give the title compds. II.

IT 113788-14-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 113788-14-0 CAPLUS

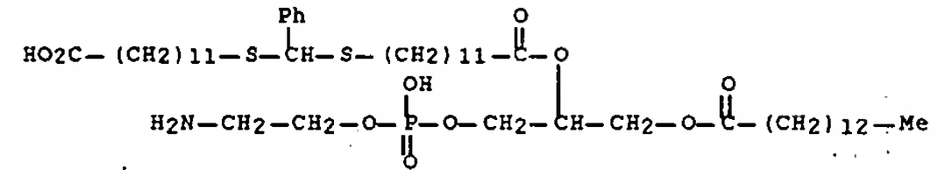
CN 5,7,10-Trioxa-23,25-dithia-2-aza-6-phosphaheptatriacontanedioic acid, 6-methoxy-11-oxo-9-[[(1-oxotetradecyl)oxy]methyl]-24-phenyl-, 1-(1,1-dimethylethyl) ester, 6-oxide (9CI) (CA INDEX NAME)



IT 113788-20-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 113788-20-8 CAPLUS

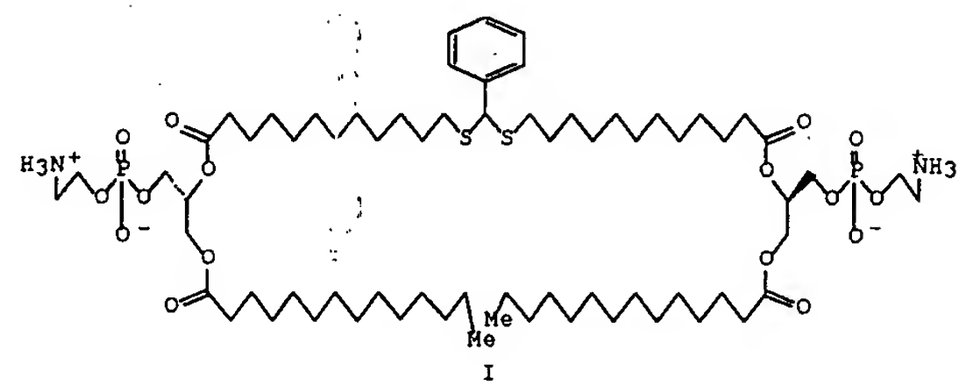
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-, 4-oxide (9CI) (CA INDEX NAME)



L7 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	1988:112865 CAPLUS Full-text
DOCUMENT NUMBER:	108:112865
TITLE:	Synthesis of a bipolar phosphatidylethanolamine: a model compound for a membrane-spanning probe
AUTHOR(S):	Delfino, Jose M.; Stankovic, Charles J.; Schreiber, Stuart L.; Richards, Frederic M.
CORPORATE SOURCE:	Sterling Chem. Lab., Yale Univ., New Haven, CT, 06520, USA
SOURCE:	Tetrahedron Letters (1987), 28(21), 2323-6 CODEN: TELEAY; ISSN: 0040-4039.
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 108:112865

GI



I

AB A general strategy for the synthesis of membrane-spanning bipolar phospholipids equipped with a reactive functional group probe of the membrane environment is described. The strategy is exemplified by the synthesis of a bisphosphatidylethanolamine I that is connected through a benzylidene thioacetal of the ω-hydroxy esters at the sn-2 position of the two phosphoglycerol termini.

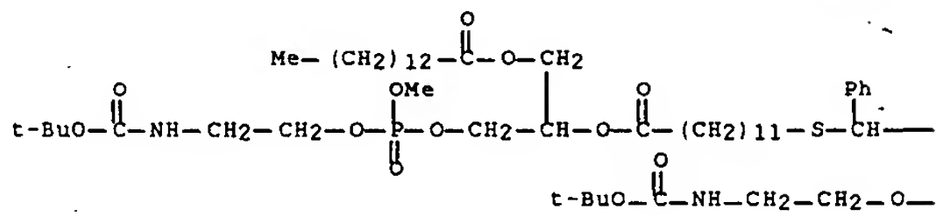
IT 113297-39-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 113297-39-5 CAPLUS

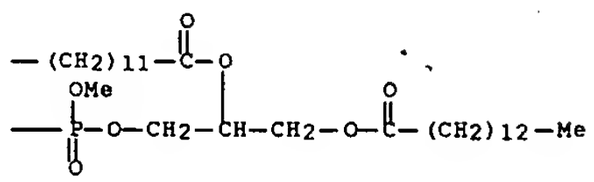
CN 5,7,10,37,40,42-Hexaoxa-23-thia-2,45-diaza-6,41-diphosphahexatetracontanedioic acid, 6,41-dimethoxy-11,36-dioxo-9,38-bis[[(1-oxotetradecyl)oxy]methyl]-24-phenyl-, bis(1,1-dimethylethyl)

ester, 6,41-dioxide (9CI) (CA INDEX NAME)

PAGE 1-A



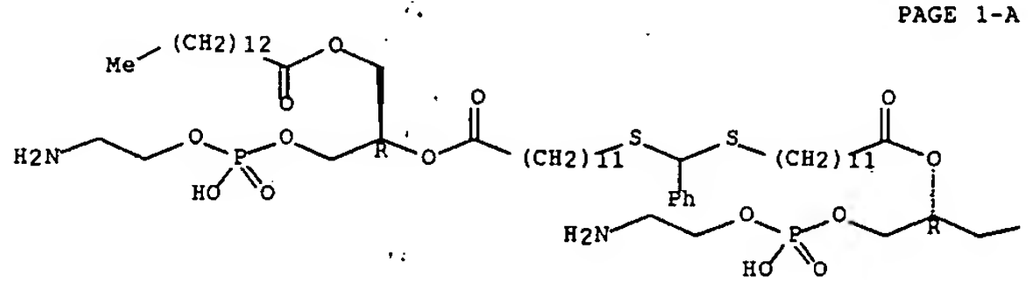
PAGE 1-B



IT 113297-40-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 113297-40-8 CAPLUS
CN 3,5,8-Trioxa-21,23-dithia-4-phosphapentatriacontan-35-oic acid, 1-amino-4-hydroxy-9-oxo-7-[[(1-oxotetradecyl)oxy]methyl]-22-phenyl-, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-oxotetradecyl)oxy]ethyl ester, 4-oxide, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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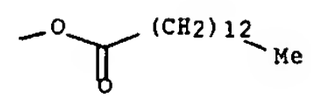
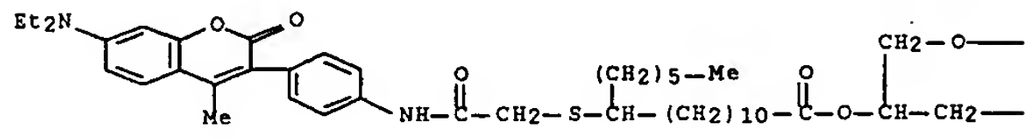


L7 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:455098 CAPLUS Full-text
DOCUMENT NUMBER: 107:55098
TITLE: Novel fluorescent phospholipids for assays of lipid mixing between membranes
AUTHOR(S): Silvius, John R.; Leventis, Rania; Brown, Pamela M.; Zuckermann, Martin
CORPORATE SOURCE: Dep. Biochem., McGill Univ., Montreal, QC, H3G 1Y6, Can.
SOURCE: Biochemistry (1987), 26(14), 4279-87
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of fluorescent phospholipids has been synthesized, by a general and versatile procedure, with various fluorescent groups attached to the methyl-terminal half of 1 acyl chain in an otherwise normal phospholipid structure. Phospholipids labeled with (dialkylamino)coumarin moieties, and to a slightly lesser extent those labeled with a bimane group, exhibit a strong and stable blue fluorescence in phospholipid dispersions that is relatively insensitive to the phys. state of the lipid phase. The fluorescence of these labeled phospholipids is efficiently quenched by resonance energy transfer to lipids labeled with a [[(dimethylamino)phenyl]azo]p henyl or a methyl(nitrobenzoxadiazolyl)amino group when these acceptors are incorporated into the same bilayer as the donor species. Acyl chain-labeled phospholipid probes, both of whose chains are at least 16 carbons in length, exchange extremely slowly between lipid vesicles (<1% exchange/h). These properties allow various donor-acceptor combinations of probes to be employed in sensitive and reliable assays of lipid mixing accompanying membrane fusion. In 2 particularly demanding applications (assays of the Ca-mediated coalescence of phosphatidylserine vesicles and of the proton-triggered coalescence of phosphatidylethanolamine vesicles), some combinations of acyl chain-labeled probes offer substantial advantages over the commonly used N-(7-nitrobenz-2-oxa-1,3-diazol-4- yl)phosphatidylethanolamine/N-(lissamine rhodamine B sulfonyl)phosphatidylethanolamine pair to monitor accurately the progress of lipid mixing between vesicles.

IT 108535-71-3 108535-73-5 108535-74-6
RL: PRP (Properties)
(fluorescence of, in phospholipid vesicles, lipid mixing between membranes study in relation to)
RN 108535-71-3 CAPLUS
CN 3,5,8-Trioxa-21-thia-4-phosphatricosan-1-aminium, 23-[[4-[7-(diethylamino)-4-methyl-2-oxo-2H-1-benzopyran-3-yl]phenyl]amino]-20-hexyl-4-hydroxy-N,N,N-trimethyl-9,23-dioxo-7-[[(1-oxo-1-hexadecyl)oxy]methyl]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

PAGE 1-A



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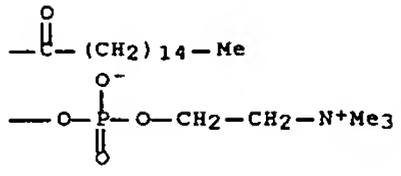
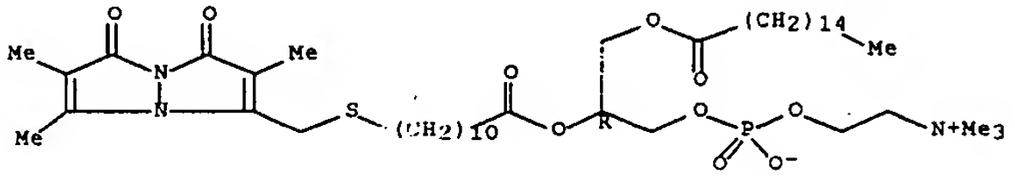


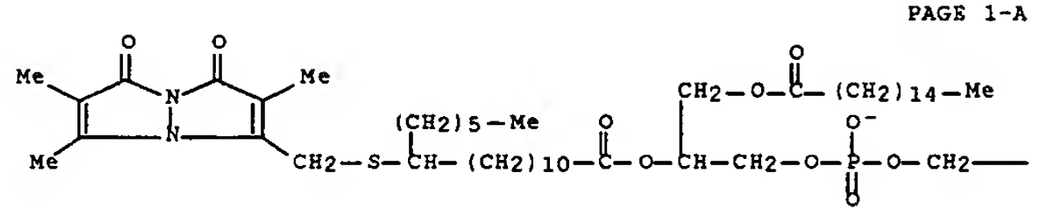
RN 108535-73-5 CAPLUS
CN 14,17,19-Trioxa-2-thia-18-phosphaheneicosan-21-aminium, 18-hydroxy-N,N,N-trimethyl-13-oxo-15-[[(1-oxohexadecyl)oxy]methyl]-1-(2,5,6-trimethyl-1,7-dioxo-1H,7H-pyrazolo[1,2-a]pyrazol-3-yl)-, inner salt, 18-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 108535-74-6 CAPLUS
CN 15,18,20-Trioxa-2-thia-19-phosphadocosan-22-aminium, 3-hexyl-19-hydroxy-N,N,N-trimethyl-14-oxo-16-[[(1-oxohexadecyl)oxy]methyl]-1-(2,5,6-trimethyl-1,7-dioxo-1H,7H-pyrazolo[1,2-a]pyrazol-3-yl)-, inner salt, 19-oxide (9CI) (CA INDEX NAME)

PAGE 1-A



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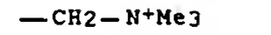

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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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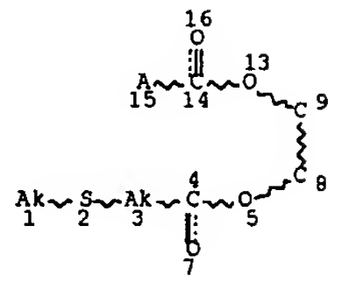

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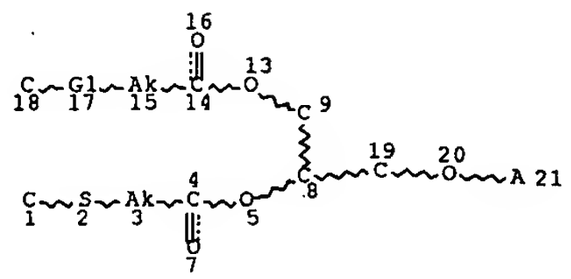

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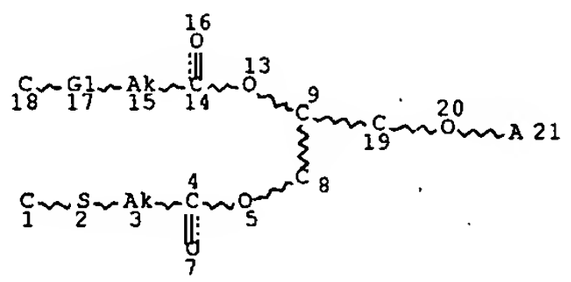

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L15           1 S L14 NOT PY<2002
L16          16 S L13 OR L15

=> sel l16 1-16 hit rn
E1 THROUGH E38 ASSIGNED

L16  ANSWER 1 OF 16  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:       2006:1327112  CAPLUS  Full-text
DOCUMENT NUMBER:        146:252028
TITLE:                  Synthesis of Boron Cluster Lipids:
                        closo-Dodecaborate as an Alternative Hydrophilic
                        Function of Boronated Liposomes for Neutron
                        Capture Therapy
AUTHOR(S):              Lee, Jong-Dae; Ueno, Manabu; Miyajima, Yusuke;
                        Nakamura, Hiroyuki
CORPORATE SOURCE:       Department of Chemistry, Faculty of Science,
                        Gakushuin University, Mejiro, Toshima-ku, Tokyo,
                        171-8588, Japan
SOURCE:                 Organic Letters (2007), 9(2), 323-326
                        CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER:              American Chemical Society
DOCUMENT TYPE:          Journal
LANGUAGE:               English
OTHER SOURCE(S):        CASREACT 146:252028
AB   We succeeded in the synthesis of the double-tailed boron cluster lipids 4a-c
     and 5a-c, which have a B12H11S moiety as a hydrophilic function, by S-
     alkylation of B12H11SH (BSH) with bromoacetyl and chloroacetocarbamate derivs.
     of diacylglycerols for a liposomal boron delivery system on neutron capture
     therapy.  Calcein encapsulation expts. revealed that the liposomes, prepared
     from the boron cluster lipid 4b, DMPC, PEG-DSPE, and cholesterol, are stable
     at 37 °C in FBS solution for 24 h.
IT   925698-19-7P 925698-21-1P 925698-23-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (synthesis of boron cluster lipids: closo-dodecaborate as an
        alternative hydrophilic function of boronated liposomes for neutron
        capture therapy)
RN   925698-19-7  CAPLUS
CN   INDEX NAME NOT YET ASSIGNED

     CM   1

     CRN  925698-18-6
     CMF  C36 H76 B12 N O6 S
     CCI  RIS
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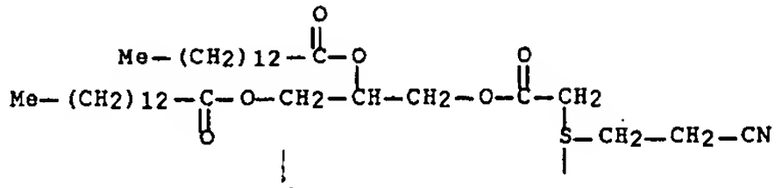
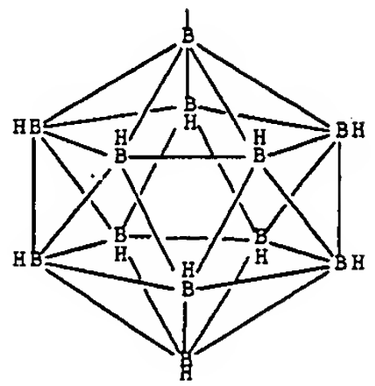
Ans. set limited to patent/non-patent docs. dated prior to 2002

PAGE 1-A

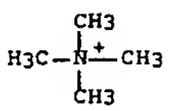


PAGE 2-A



CM 2

CRN 51-92-3
CMF C4 H12 N



RN 925698-21-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

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CRN 925698-20-0
CMF C40 H84 B12 N O6 S
CCI RIS

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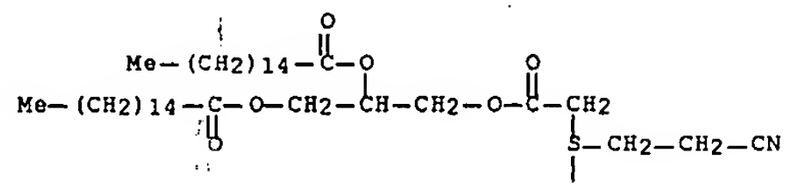

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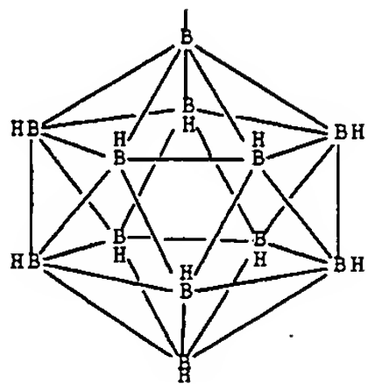

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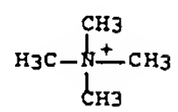

RN 925698-23-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

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CCI RIS

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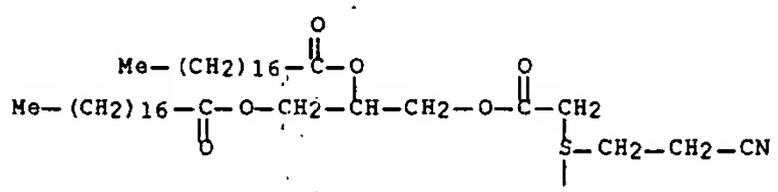

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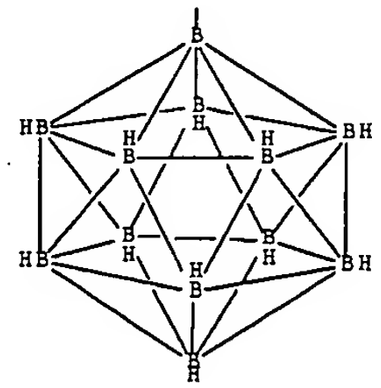
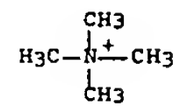


CM 2

CRN 51-92-3
CMF C4 H12 N



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:133230 CAPLUS Full-text
DOCUMENT NUMBER: 138:175891
TITLE: Fatty acid compounds, preparations, and uses thereof
INVENTOR(S): Najib-Fruchart, Jamila; Caumont-Bertrand, Karine
PATENT ASSIGNEE(S): Genfit, Fr.
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

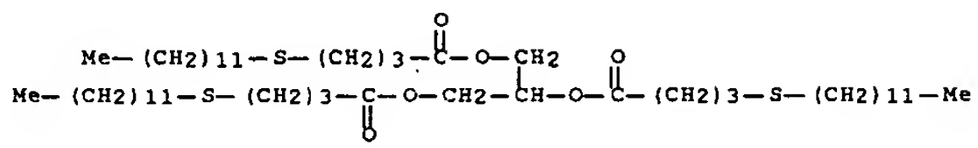
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003014073	A1	20030220	WO 2002-FR2831 <--	20020808
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
FR 2828487	A1	20030214	FR 2001-10645 <--	20010809
FR 2828487	B1	20050527		
CA 2456288	A1	20030220	CA 2002-2456288 <--	20020808
AU 2002342968	A1	20030224	AU 2002-342968 <--	20020808
JP 2004537595	T	20041216	JP 2003-519023 <--	20020808
EP 1673338	A1	20060628	EP 2002-779622 <--	20020808
US 2004192908	A1	20040930	US 2004-484350 <--	20040121
PRIORITY APPLN. INFO.:			FR 2001-10645 A <--	20010809
			WO 2002-FR2831 W	20020808

OTHER SOURCE(S): MARPAT 138:175891
AB The invention concerns novel mols., their preparation and their uses, in particular in the field of human and veterinary medicine and in cosmetics. The inventive compds. are partly fatty acid derivs. and exhibit advantageous

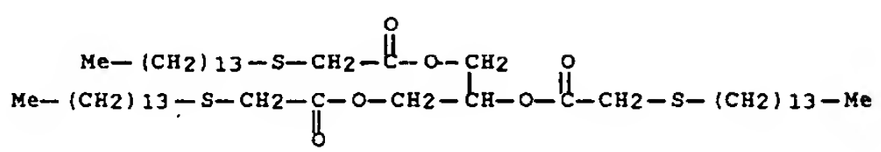
pharmacol. and cosmetic properties. The invention also concerns various uses of said compds., the pharmaceutical compns. containing them and methods for preparing them. The inventive compds. are useful in particular for preventing and/or treating dyslipidemias, cardiovascular diseases, syndrome X, restenosis, diabetes, obesity, hypertension, certain cancers, dermatol. diseases, and in cosmetics for fighting against skin aging and its effects notably against wrinkles and the like.

IT 31716-45-7P 497263-29-3P 497263-30-6P
497263-31-7P 497263-32-8P 497263-34-0P
497263-35-1P 497263-36-2P 497263-37-3P
497263-38-4P 497263-39-5P 497263-40-8P
497263-41-9P
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fatty acid compds., prepns., and uses thereof)

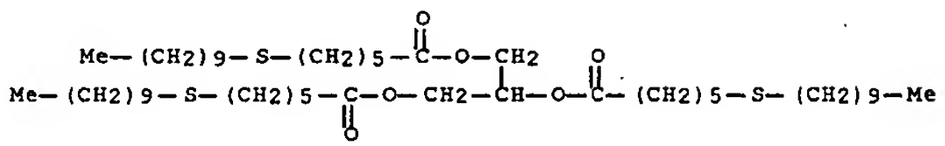
RN 31716-45-7 CAPLUS
CN Butanoic acid, 4-(dodecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



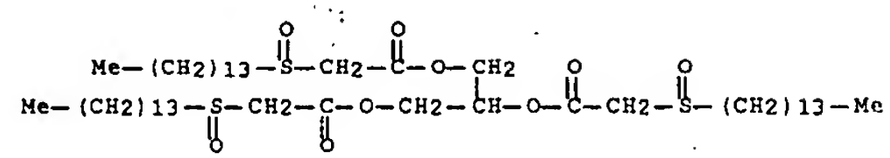
RN 497263-29-3 CAPLUS
CN Acetic acid, (tetradecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



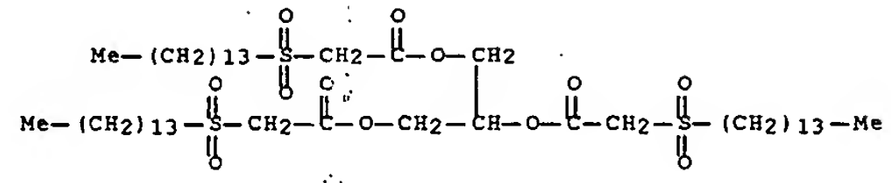
RN 497263-30-6 CAPLUS
CN Hexanoic acid, 6-(decylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



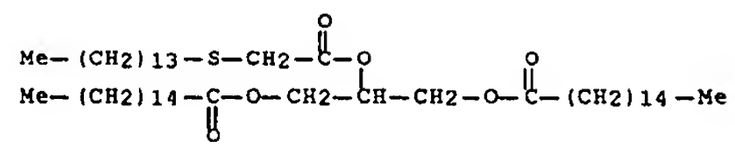
RN 497263-31-7 CAPLUS
CN Acetic acid, (tetradecylsulfinyl)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



RN 497263-32-8 CAPLUS
CN Acetic acid, (tetradecylsulfonyl)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



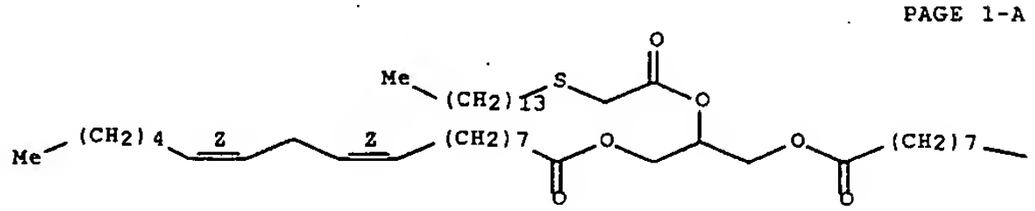
RN 497263-34-0 CAPLUS
CN Hexadecanoic acid, 2-[[(tetradecylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 497263-35-1 CAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)-, 2-[[(tetradecylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



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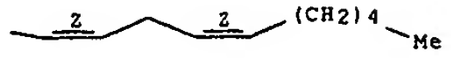
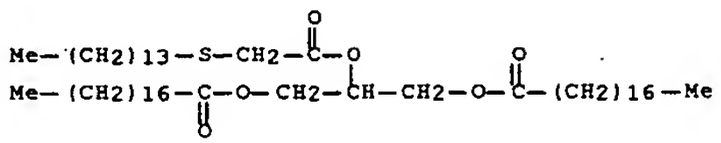


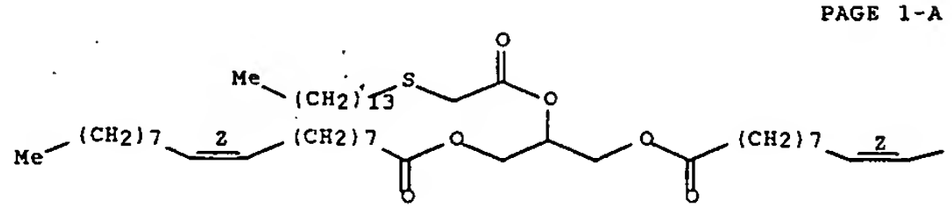
RN 497263-36-2 CAPLUS
CN Octadecanoic acid, 2-[[(tetradecylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



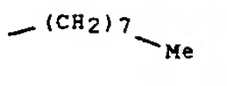
RN 497263-37-3 CAPLUS
CN 9-Octadecenoic acid (9Z)-, 2-[[(tetradecylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

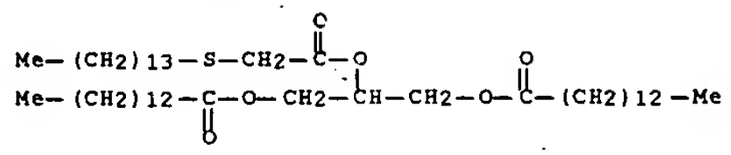
PAGE 1-A



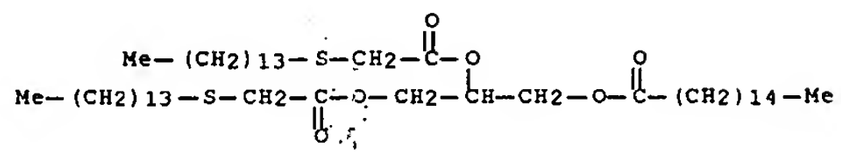
PAGE 1-B



RN 497263-38-4 CAPLUS
CN Tetradecanoic acid, 2-[[(tetradecylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

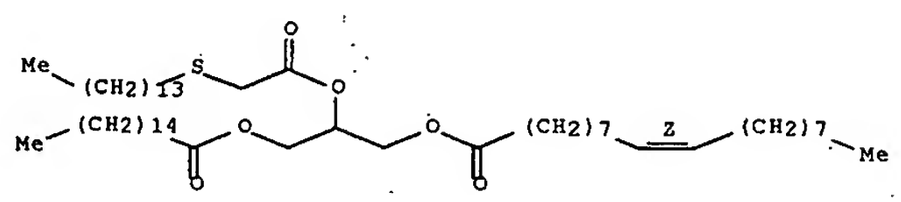


RN 497263-39-5 CAPLUS
CN Hexadecanoic acid, 2,3-bis[[(tetradecylthio)acetyl]oxy]propyl ester (9CI) (CA INDEX NAME)

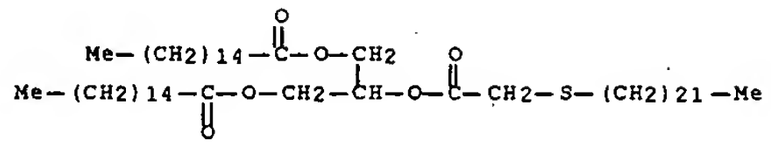


RN 497263-40-8 CAPLUS
CN 9-Octadecenoic acid (9Z)-, 3-[(1-oxohexadecyl)oxy]-2-[[(tetradecylthio)acetyl]oxy]propyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 497263-41-9 CAPLUS
CN Hexadecanoic acid, 2-[[(docosylthio)acetyl]oxy]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:63958 CAPLUS Full-text
DOCUMENT NUMBER: 134:131810
TITLE: Preparation of oligomeric amino acid derivatives useful as nitric oxide synthase inhibitors

INVENTOR(S): Webber, R. Keith; Reuppel, Melvin L.; Hansen, Donald W., Jr.; Hallinan, E. Ann; Hagen, Timothy J.; Pitzele, Barnett S.
PATENT ASSIGNEE(S): Monsanto Company, USA
SOURCE: PCT Int. Appl., 311 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001005748	A1	20010125	WO 2000-US19373 <--	20000714

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-143867P P 19990715 <--

AB Novel oligomeric amidino amino carboxylate derivs. [Ia]f[Ib]gB[Ic]h[Id]i [B is a linker group; f, g, h, and i are integers 0-5, with the proviso that the sum of f, g, h, and i must be at least two; Ia, Ib, Ic, and Id are independently selected from a structure R3N:CYNR4-X-CR8(NR1R2)CJ1J2-A-R7 attached to linker B by replacement of a substituent group; J1, J2 = OH, alkoxy, SH, alkylthio, amino, alkylamino, etc.; A = O, imino group, S, heterocyclyl, etc.; R1, R2 = H, hydroxyalkyl, aminoalkyl, alkyl, hetero, heterocyclyl, cycloalkyl, etc. or R1R2N may form a ring; R3, R4 = H, OH, SH, alkoxy, alkylthio, CH2SO3- M+, CH2PO3- M+ (M+ is a pharmaceutically acceptable cation), etc. or R3 and R4 together form a group; R7 = H, aryl, heteroaralkyl, OH, alkyl, amino, etc.; R8 = H, hydroxyalkyl, haloalkyl, alkyl, formyl, C(O)-A-R7, etc.; X = alkylene, alkenylene, alkynylene, (CH2)p-Q-(CH2)r, where p = 1-3 and Q = O, CO, NHSO2, etc.; Y = alkyl, cycloalkyl, cycloalkenyloxy, alkylthioalkyl, etc. (with provisos)] were prepared as nitric oxide synthase inhibitors. 1,5-Bis[6-[(1-iminoethyl)amino]-2-amino-2-methylhexanamido]pentane tetrahydrochloride is one of thirty-two compds. claimed.

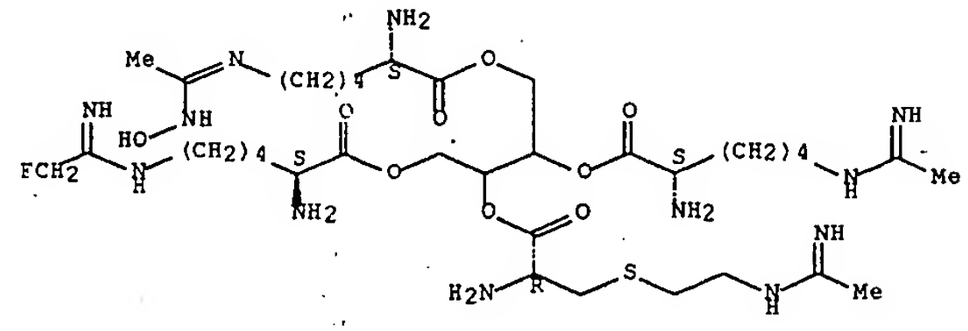
IT 321849-63-2P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of oligomeric amino acid derivs. useful as nitric oxide synthase inhibitors)

RN 321849-63-2 CAPLUS
CN L-Lysine, N6-(2-fluoro-1-iminoethyl)-, 4-[[(2S)-2-amino-6-[[1-(hydroxyamino)ethylidene]amino]-1-oxohexyl]oxy]-2-[(2R)-2-amino-3-[[2-[(1-iminoethyl)amino]ethyl]thio]-1-oxopropoxy]-3-[[(2S)-2-amino-6-[(1-iminoethyl)amino]-1-oxohexyl]oxy]butyl ester, octakis(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

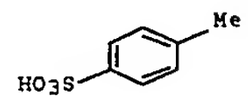
CRN 321849-62-1
CMF C35 H67 F N12 O9 S

Absolute stereochemistry.



CM 2

CRN 104-15-4
CMF C7 H8 O3 S



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:367983 CAPLUS Full-text
DOCUMENT NUMBER: 133:22412
TITLE: Cationic lipids for use liposomes for drug delivery
INVENTOR(S): Xiang, Gao
PATENT ASSIGNEE(S): Vanderbilt University, USA
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000030444	A1	20000602	WO 1999-US27841 <--	19991123
W: AU, CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6656498	B1	20031202	US 1999-447688 <--	19991123
US 2003049310	A1	20030313	US 2002-224706 <--	20020820
US 7002042	B2	20060221		

US 2006057194	A1	20060316	US 2005-201496 <--	20050811
US 7067697	B2	20060627		

PRIORITY APPLN. INFO.:

US 1998-109950P <--	P	19981125
US 1998-110970P <--	P	19981204
US 1999-447688 <--	A3	19991123
US 2002-224706	A1	20020820

OTHER SOURCE(S): MARPAT 133:22412

AB The present invention relates to synthetic cationic lipids, liposome formulations and the use of such compds. to introduce functional bioactive agents into cultured cells.

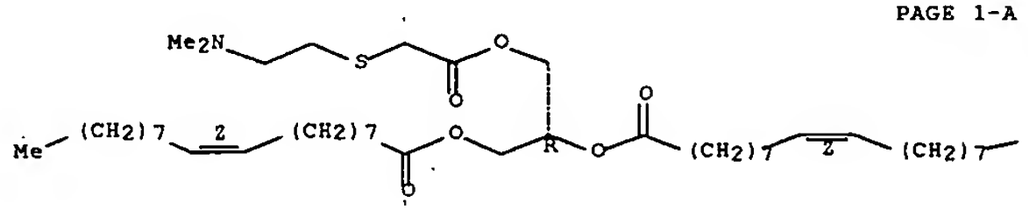
IT 272462-71-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pren. and reactions of; cationic lipids for use liposomes for drug delivery)

RN 272462-71-2 CAPLUS

CN 9-Octadecenoic acid (9Z)-, (1R)-1-[[[[[2-(dimethylamino)ethyl]thio]acetyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

Me

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:326341 CAPLUS Full-text
DOCUMENT NUMBER: 125:17173
TITLE: Metal-silicon composite alkoxides and their manufacture for glass surface treatment
INVENTOR(S): Iyanagi, Koichi
PATENT ASSIGNEE(S): Pola Kasei Kogyo KK, Japan; Pola Chemical Industries, Inc.
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08040722	A	19960213	JP 1994-195868 <--	19940728
JP 3485273	B2	20040113		

PRIORITY APPLN. INFO.: JP 1994-195868 <-- 19940728

OTHER SOURCE(S): MARPAT 125:17173

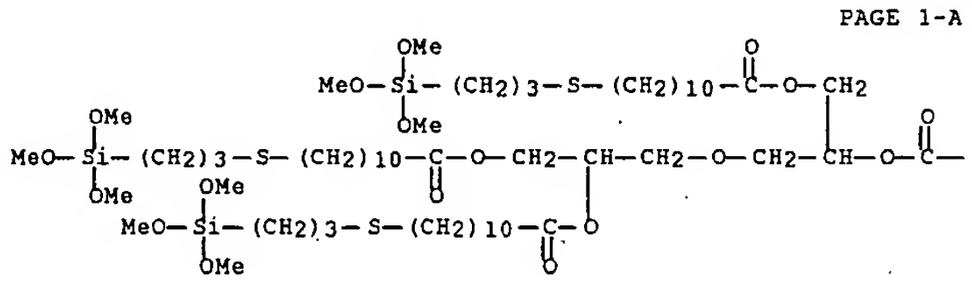
AB The alkoxides represent (R'O)4-nM[O(C)OQSi(Xa)(OR)3-a]n (M = Ti or Zr; R = alkyl; R' = C≤4 alkyl; Q = hydrocarbyl or S-containing divalent hydrocarbyl group; X = monovalent hydrocarbyl; a = 0-2 integer; n = 1 or 2). The alkoxides may be prepared from organosilicon compds. O[C(O)R']C(O)QSi(Xa)(OR)3-a and M(OR')4 (R' = C≤3 alkyl). The articles, especially suitable for primers, give titania or zirconia coatings with high wear resistance.

IT 170291-29-9P
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(metal-silicon composite alkoxides for coating of titania or zirconia on glasses)

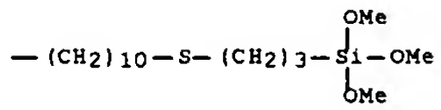
RN 170291-29-9 CAPLUS

CN Undecanoic acid, 11-[[3-(trimethoxysilyl)propyl]thio]-, oxydi-3,1,2-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L16 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:228499 CAPLUS Full-text
DOCUMENT NUMBER: 124:263548
TITLE: Alkali-resistant coating compositions

INVENTOR(S): Iyanagi, Koichi
PATENT ASSIGNEE(S): Pola Kasei Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07331176	A	19951219	JP 1994-147163 <--	19940606
PRIORITY APPLN. INFO.:			JP 1994-147163 <--	19940606

AB Coating compns. contain 10-80% polyhydric alc. esters having alkoxysilylated acyl groups. Thus, diglycerin tetra(10-undecenoate) reacted with 3-mercaptopropyltrimethoxysilane to give a tetrakis(trimethoxysilyl) derivative, mixed with ethanol, water, and HCl, and coated on slide glass.

IT 170291-37-9P 175391-61-4P 175391-62-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkali-resistant coatings)

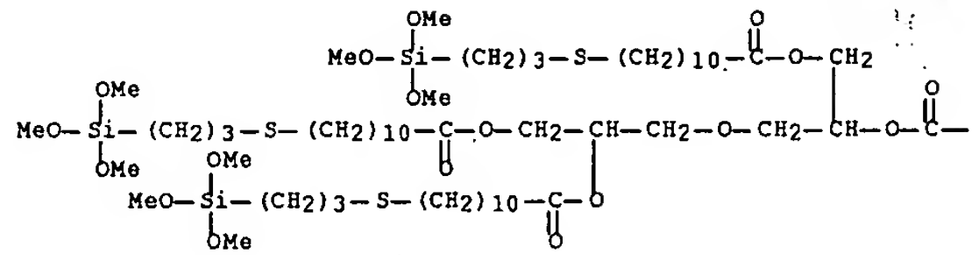
RN 170291-37-9 CAPLUS

CN Undecanoic acid, 11-[[3-(trimethoxysilyl)propyl]thio]-, oxydi-3,1,2-propanetriyl ester, homopolymer (9CI) (CA INDEX NAME)

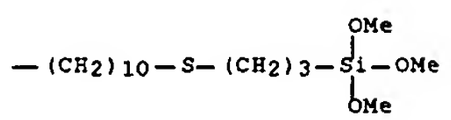
CM 1

CRN 170291-29-9
CMF C74 H150 O21 S4 Si4

PAGE 1-A



PAGE 1-B



RN 175391-61-4 CAPLUS

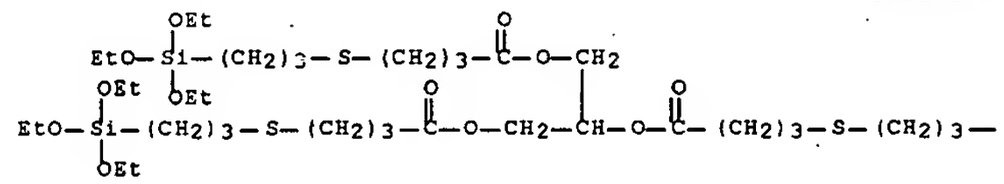
CN Butanoic acid, 4-[[3-(triethoxysilyl)propyl]thio]-, 1,2,3-propanetriyl ester, polymer with silicic acid (H4SiO4) tetraethyl ester (9CI) (CA

INDEX NAME)

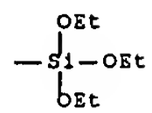
CM 1

CRN 170291-30-2
CMF C42 H86 O15 S3 Si3

PAGE 1-A

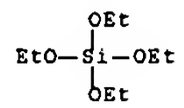


PAGE 1-B



CM 2

CRN 78-10-4
CMF C8 H20 O4 Si



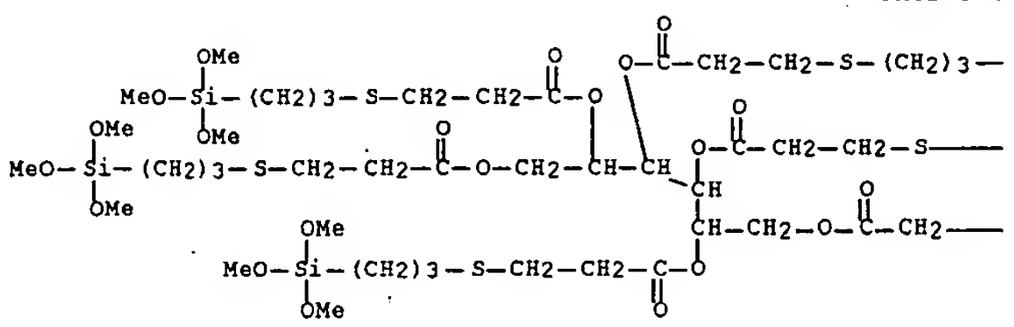
RN 175391-62-5 CAPLUS

CN D-Glucitol, hexakis[3-[[3-(trimethoxysilyl)propyl]thio]propanoate], polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

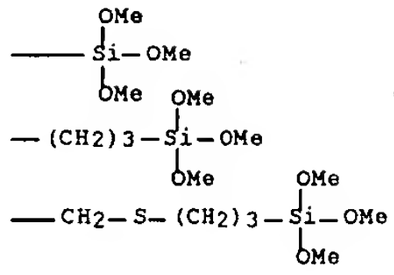
CM 1

CRN 170291-32-4
CMF C60 H122 O30 S6 Si6

PAGE 1-A

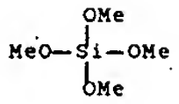


PAGE 1-B



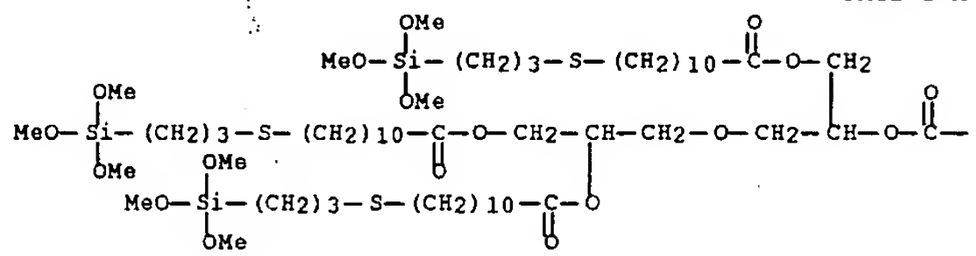
CM 2

CRN 681-84-5
CMF C4 H12 O4 Si

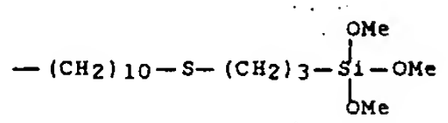


IT 170291-29-9P 170291-30-2P 170291-32-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture and polymerization of)
RN 170291-29-9 CAPLUS
CN Undecanoic acid, 11-[[3-(trimethoxysilyl)propyl]thio]-, oxydi-3,1,2-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

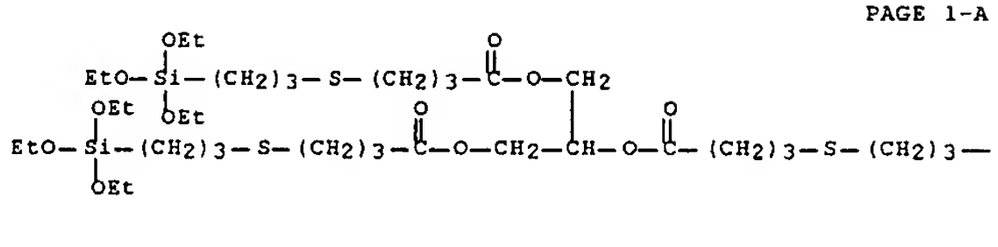


PAGE 1-B

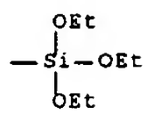


RN 170291-30-2 CAPLUS
CN Butanoic acid, 4-[[3-(triethoxysilyl)propyl]thio]-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

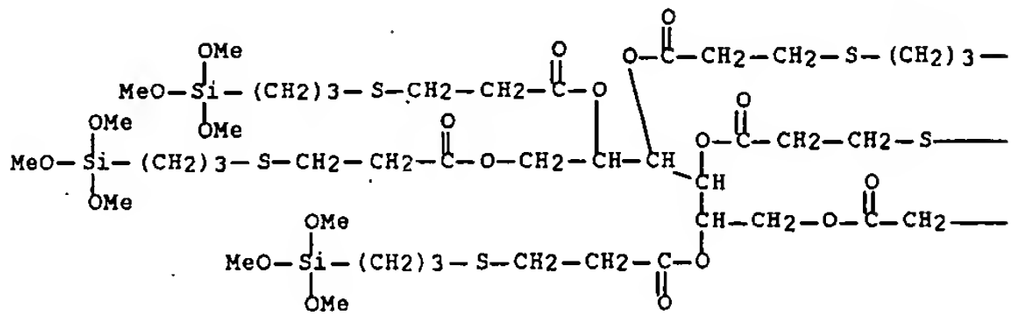


PAGE 1-B

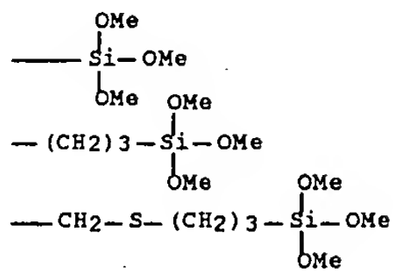


RN 170291-32-4 CAPLUS
CN D-Glucitol, hexakis[3-[[3-(trimethoxysilyl)propyl]thio]propanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



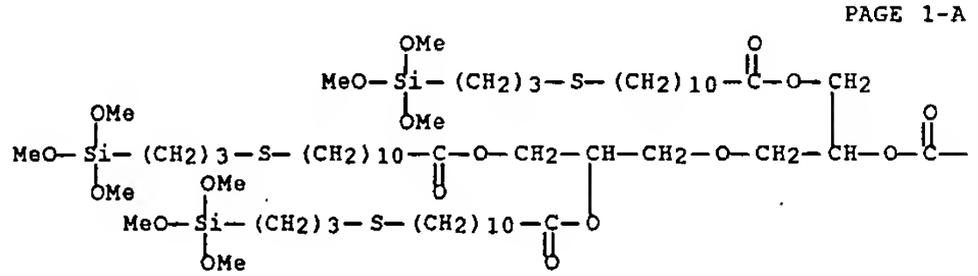
L16 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:780702 CAPLUS Full-text
DOCUMENT NUMBER: 123:317097
TITLE: Preparation of alkoxysilanes for coupling agents
INVENTOR(S): Iyanagi, Koichi
PATENT ASSIGNEE(S): Pola Kasei Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07157492	A	19950620	JP 1993-304302 <--	19931203
JP 3273842	B2	20020415		
PRIORITY APPLN. INFO.:			JP 1993-304302 <--	19931203

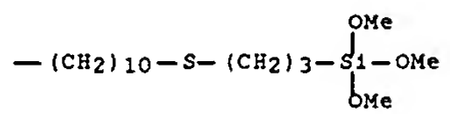
OTHER SOURCE(S): MARPAT 123:317097
AB Polyhydric alc. esters having COQSi(OR)3 (R = alkyl; Q = hydrocarbylene, S-containing divalent organic group) residues are prepared Heating diglycerin tetra-10-undecenoate, 3- mercaptopropyltrimethoxysilane, and AIBN in C6H6 at reflux for 24 h gave corresponding tetra(alkoxysilylted) ester.
IT 170291-29-9P 170291-30-2P 170291-32-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of alkoxysilanes for coupling agents)
RN 170291-29-9 CAPLUS
CN Undecanoic acid, 11-[[3-(trimethoxysilyl)propyl]thio]-, oxydi-3,1,2-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

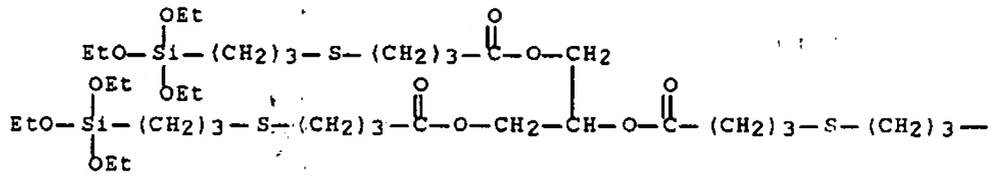


PAGE 1-B

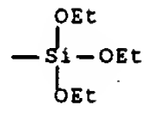


RN 170291-30-2 CAPLUS
CN Butanoic acid, 4-[[3-(triethoxysilyl)propyl]thio]-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

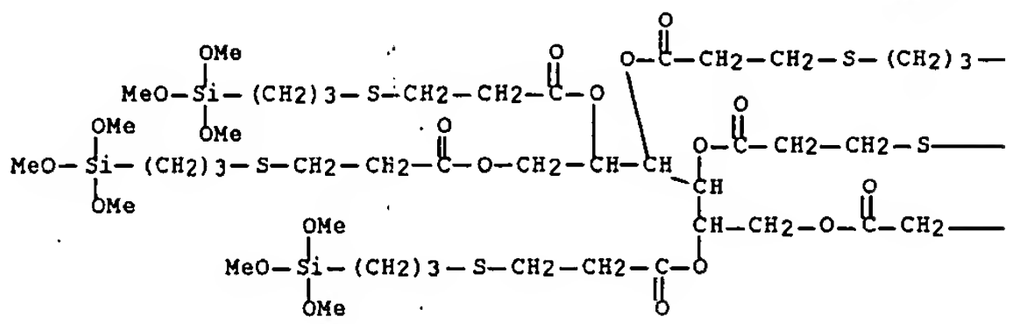


PAGE 1-B

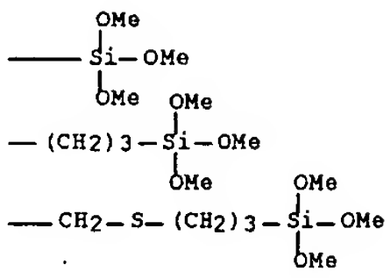


RN 170291-32-4 CAPLUS
CN D-Glucitol, hexakis[3-[[3-(trimethoxysilyl)propyl]thio]propanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



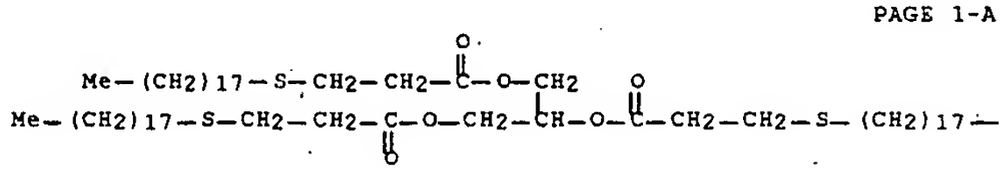
L16 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:613787 CAPLUS Full-text
DOCUMENT NUMBER: 117:213787
TITLE: Polycarbonate compositions for vivid-colored moldings
INVENTOR(S): Asao, Toshiaki; Hosomi, Tatsuhide
PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04120164	A	19920421	JP 1990-239028 <--	19900911
PRIORITY APPLN. INFO.:			JP 1990-239028 <--	19900911

AB The title compns., useful for injection moldings, sheets, films, etc., contain 0.00001-0.3 phr anthraquinone dyes and 0.001-0.5 phr thio- or thioether-containing carboxylic acid esters. Thus, bisphenol A polycarbonate containing 0.00008 phr anthraquinone violet and 0.05 phr pentaerythritol tetrakis(3-laurylthiopropionate) was injection molded to a 3-mm sheet with a vivid violet color.

IT 31716-42-4
RL: USES (Uses)
(in polycarbonates moldings with vivid color)
RN 31716-42-4 CAPLUS
CN Propanoic acid, 3-(octadecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

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L16 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:26291 CAPLUS Full-text
DOCUMENT NUMBER: 102:26291
TITLE: Lubricant finishes for acrylic precursors for carbon fibers
PATENT ASSIGNEE(S): Takemoto Oil and Fat Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59116473	A	19840705	JP 1982-234306 <--	19821222
JP 62057743	B	19871202		
PRIORITY APPLN. INFO.:			JP 1982-234306 <--	19821222

AB Title finishes contain a N-containing surfactant and an ester of a thio fatty acid RS(CH2)nCO2H (R = C6-22 alkyl, alkenyl; n = 1-3) and an aliphatic dibasic acid having its two carboxyl groups bonded to an aliphatic polyhydric alc. containing 2-4 OH groups. The N-containing surfactant may be a tertiary amine oxide R1N(O)R2R3 (R1 = C8-22 alkyl, alkenyl, C2H4OH; R2, R3 = C1-22 alkyl, alkenyl). This finish imparts excellent separability, smoothness, and antistatic properties to acrylic precursor fibers for carbon fibers. Thus, a composition containing C14H29SCH2CH2CO2CH2CMe2CH2CO2(CH2)4CO2CH2CMe2CH2CO2CH2CH2SC14H29 [93933-56-3], polyethylene glycol nonylphenyl ether, polyethylene glycol lauryl ether, ethoxylated hydrogenated castor oil isocetyl phosphate diethanolamine salt [94122-03-9], and dimethylaurylamine oxide [1643-20-5] was adhered to acrylic

filaments. The coated filaments were then dried and heated to give yarns with small friction coefficient, good filament separability, and excellent melt resistance.

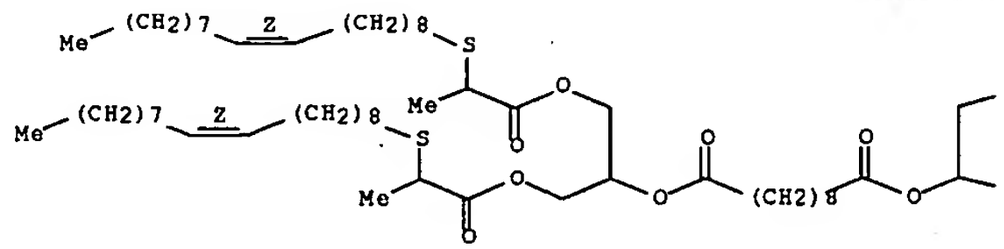
IT 93933-52-9
RL: USES (Uses)
(lubricant finishes, containing nitrogen compds., for acrylic precursors for carbon fibers)

RN 93933-52-9 CAPLUS

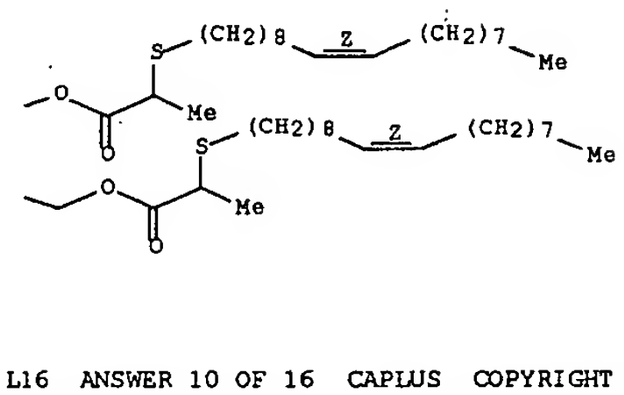
CN Decanedioic acid, bis[2-[3-(9-octadecenylthio)-1-oxopropoxy]-1-[[3-(9-octadecenylthio)-1-oxopropoxy]methyl]ethyl] ester, (all-Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



L16 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:18071 CAPLUS Full-text
DOCUMENT NUMBER: 98:18071
TITLE: Lubricant finishes for synthetic fibers
PATENT ASSIGNEE(S): Matsumoto Yushi-Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57082573	A	19820524	JP 1980-156098 <--	19801105
JP 61053473	B	19861118		

PRIORITY APPLN. INFO.: JP 1980-156098 19801105 <--

AB Lubricant finishes containing an ester, amide, or thioester containing RSZ(CO)n groups, where R is C1-22 aliphatic or aromatic hydrocarbon group, Z is alkylene, and n is 1 or 2, are heat-resistant and useful for finishing synthetic fibers. Thus, 3 mol oleylmercaptan-acrylic acid reaction product was esterified with 1 mol glycerol to give an ester (I) [83995-03-3]. A lubricant composition (A) containing 60% I was heated 4 h at 220° without fume generation, whereas severe fume generation occurred for a similar composition containing oleyl oleate instead of I. Filament frictional coefficient was low in finishing nylon filaments with A composition

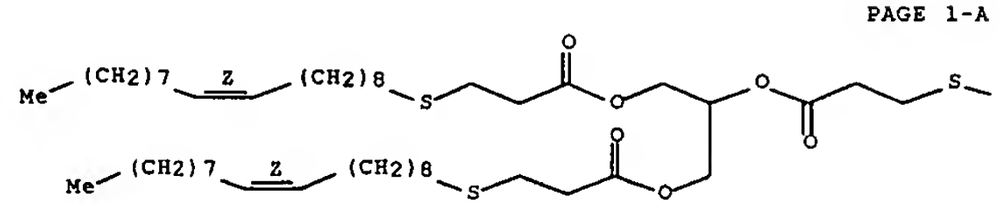
IT 83995-03-3
RL: USES (Uses)
(lubricant finishes, heat-resistant, for nylon filaments)

RN 83995-03-3 CAPLUS

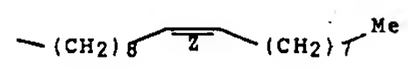
CN Propanoic acid, 3-(9-octadecenylthio)-, 1,2,3-propanetriyl ester, (Z,Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



L16 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:605661 CAPLUS Full-text
DOCUMENT NUMBER: 93:205661
TITLE: Stabilizers for synthetic polymers comprising 2,2,6,6-tetramethyl-4-piperidyl carboxylic acid ester, β-thioalkyl propionic acid ester and phenol
INVENTOR(S): Haruna, Toru; Kubota, Naohiro; Minagawa, Motonobu; Shibata, Toshihiro
PATENT ASSIGNEE(S): Argus Chemical Corp., USA
SOURCE: U.S., 55 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4219463	A	19800826	US 1977-852254	19771117

JP 53073241	A	19780629	JP 1976-149092 <--	19761210
JP 55035416	B	19800913		

PRIORITY APPLN. INFO.: JP 1976-149092 <-- A 19761210

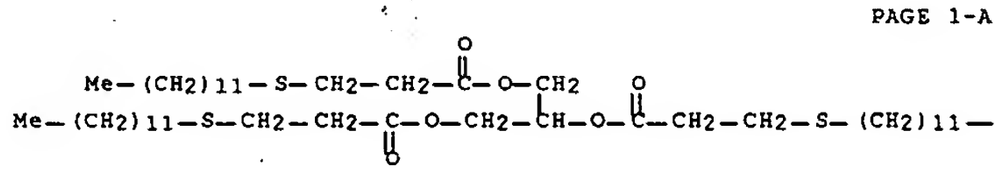
AB Stabilizers for polymers contain tetramethylpiperidyl carboxylates, (alkylthio)propionate esters, and hindered phenols. Thus, PVC [9002-86-2] containing DOP 48, epoxidized soybean oil 2, (C9H19C6H4O)3P 0.2, Ca stearate 1, 2,2,6,6-tetramethyl-4-piperidyl benzoate [26275-88-7] 0.2, BHT 0.1, and trimethylolpropane tris[3- (octadecylthio)propionate] (I) [31687-07-7] 0.1 phr has Weather-O-Meter exposure resistance 515 h, compared with 385 with S(CH2CH2CO2C12H25)2 in place of I.

IT 31716-41-3 75518-84-2
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(stabilizers, for polymers)

RN 31716-41-3 CAPLUS

CN Propanoic acid, 3-(dodecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

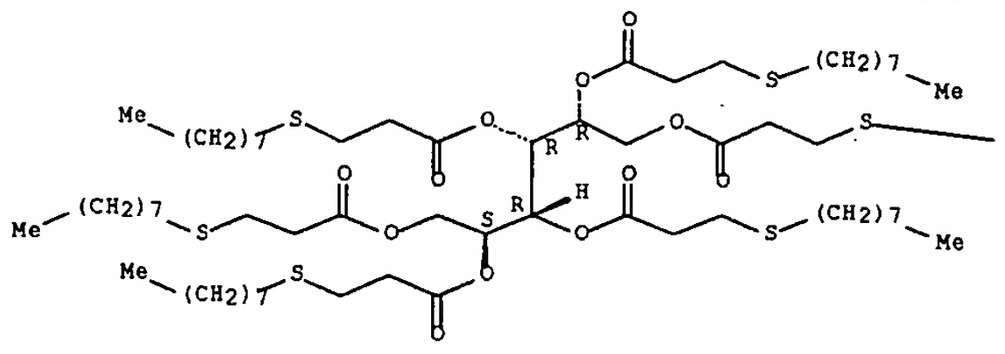
—Me

RN 75518-84-2 CAPLUS

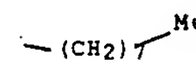
CN D-Glucitol, hexakis[3-(octylthio)propanoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L16 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:77427 CAPLUS Full-text
DOCUMENT NUMBER: 92:77427
TITLE: Heat stabilizers for thermoplastics
INVENTOR(S): Minagawa, Motonobu; Nakahara, Yutaka; Haruna, Toru
PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54041948	B4	19790403	JP 1977-108098 <--	19770908

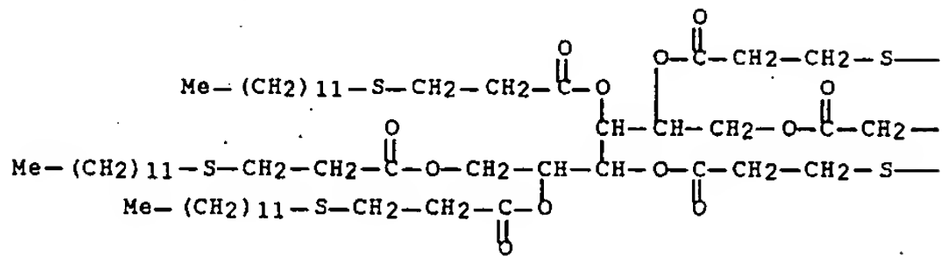
AB Compns. of thermoplastics 100, polyphosphites having alkyl-substituted Ph groups with or without pentaerythritol residues 0.001-5, and thioalkanoic acid derivs. 0.0001-5 parts have good heat stability. Thus, a mixture of Profax 6501 [9003-07-0] 100, Ca stearate 0.2, octadecyl 3-(3,5-di-tert-butylphenyl)propionate 0.1, pentaerythritol tetrakis(3-dodecylthiopropionate) (I) [29598-76-3] 0.2, and pentaerythritol bis(2,4-di-tert-butylphenyl phosphite) [26741-53-7] 0.1 part was extruded at 230-40°, pelletized, and injection molded at 250° and 475 kg/cm2 to give test pieces having heat stability in air at 160° 856 h and Hunter yellowness 8.4, compared with 267 and 11.3, resp., for a similar composition without I.

IT 71137-00-3
RL: MOA (Modifier or additive use); USES (Uses)
(heat stabilizers, containing polyphosphite esters, for thermoplastics)

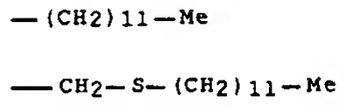
RN 71137-00-3 CAPLUS

CN D-Glucitol, hexakis[3-(dodecylthio)propanoate] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L16 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:571821 CAPLUS Full-text
DOCUMENT NUMBER: 89:171821
TITLE: Photographic gelatin hardening agent
INVENTOR(S): Yabuta, Kenji; Yamashita, Kiyoshi; Niki, Kiyoshi; Enomoto, Kazuhiro
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53039116	A	19780410	JP 1976-112866 <--	19760922
JP 55037733	B	19800930		
US 4134770	A	19790116	US 1977-835213 <--	19770921

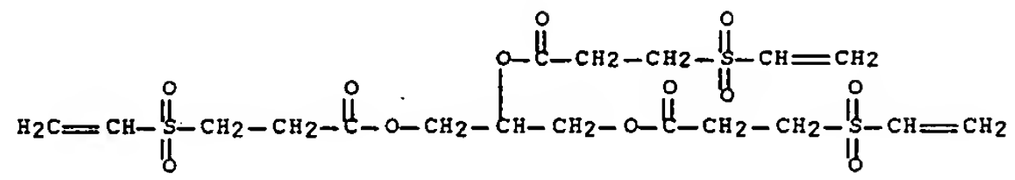
PRIORITY APPLN. INFO.: JP 1976-112866 A 19760922
<--
JP 1976-141957 A 19761126
<--

AB Photog. gelatin is hardened by using a compound of the general formula ZRn (Z = n-valent aliphatic or aromatic moiety; R = vinylsulfonylpropionyl group; n ≥ 3). The gelatin hardening agent does not exhibit a delayed (after) hardening effect and does not affect the photog. properties (sensitivity, fog, etc.) of Ag halide gelatin emulsions. Thus, N,N',N''-tris(vinylsulfonylpropionyl)diethylenetriamine 5 g/100 g gelatin was added to a Ag(Br,I)-gelatin emulsion, the emulsion was coated on a resin-coated photog. paper support, dried, and kept 2 days. The relative sensitivity, fog, and emulsion layer hardness (measured by weight on a 1-mm-diameter ball-point pen moving at 1 cm/s) were 99, 0.02, and 45 g, resp., vs. 100, 0.02, and 5 g, resp., for a control without the hardener.

IT 67951-36-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 67951-36-4 CAPLUS

CN Propanoic acid, 3-(ethenylsulfonyl)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:151548 CAPLUS Full-text
DOCUMENT NUMBER: 84:151548
TITLE: Heat stabilizers for poly(vinyl halides)
INVENTOR(S): Minagawa, Motonobu; Sekiguchi, Tetsuo
PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50160358	A	19751225	JP 1974-69816 <--	19740619
JP 57038616	B	19820817		

PRIORITY APPLN. INFO.: JP 1974-69316 A 19740619
<--

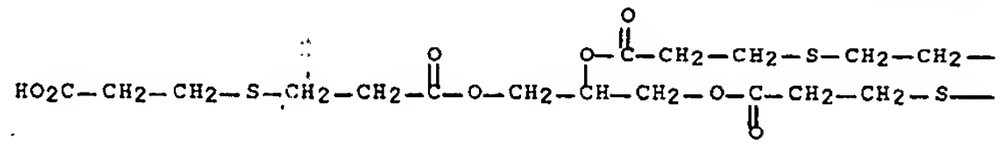
AB A heat-resistant poly(vinyl halide) resin composition contains oligomeric polyesters of thiodialkanoic acids. Thus, a mixture of PVC [9002-86-2] 100, dioctyl phthalate 48, Ba 12-hydroxystearate 1.0, Zn laurate 0.2, epoxidized soybean oil 2.0, and HO[COCH2SCH2CO2CH2CH2O]1.8COCH2SCH2CO2 H (I) [58874-35-4] 0.3 part was calendered and pressed to give a transparent molded product with improved heat resistance compared with a control without I.

IT 58888-36-1 58888-37-2 58888-38-3
RL: MOA (Modifier or additive use); USES (Uses)
(heat stabilizers, for poly(vinyl halides))

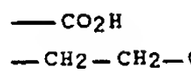
RN 58888-36-1 CAPLUS

CN 8,12-Dioxa-4,16-dithianonadecanedioic acid, 10-[3-[(2-carboxyethyl)thio]-1-oxopropoxy]-7,13-dioxo- (9CI) (CA INDEX NAME)

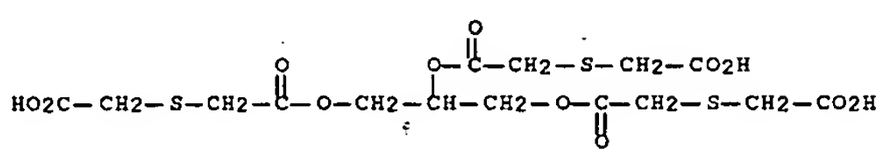
PAGE 1-A



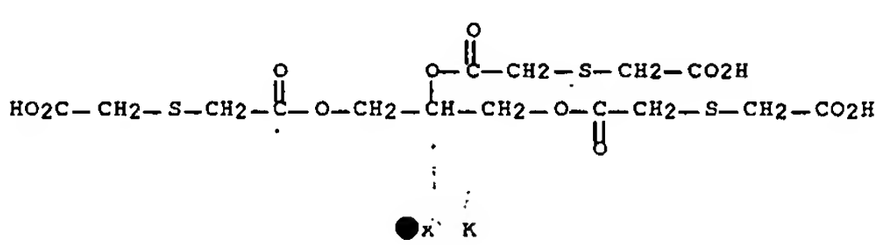
PAGE 1-B



RN 58888-37-2 CAPLUS
CN 6,10-Dioxa-3,13-dithiapentadecanedioic acid, 8-[[[(carboxymethyl)thio]acetyl]oxy]-5,11-dioxo- (9CI) (CA INDEX NAME)



RN 58888-38-3 CAPLUS
CN 6,10-Dioxa-3,13-dithiapentadecanedioic acid, 8-[[[(carboxymethyl)thio]acetyl]oxy]-5,11-dioxo-, potassium salt (9CI) (CA INDEX NAME)

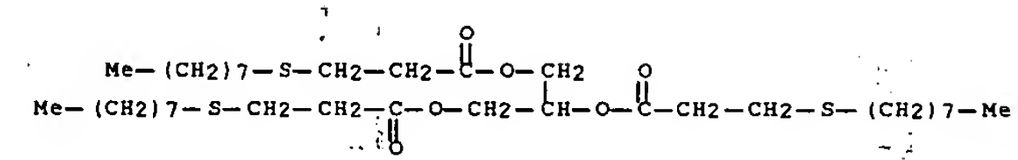


L16 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:460609 CAPLUS Full-text
DOCUMENT NUMBER: 83:60609
TITLE: Heat-stable polyolefin resin composition containing a glyceride or an alkyl thioalkanoic acid
INVENTOR(S): Ohnishi, Akiyoshi; Fukuoka, Naohiko
PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd.; Shipuro Kasei K. K.
SOURCE: Jpn. Tokkyo Koho, 7 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49023295	B	19740614	JP 1969-104891 <--	19691227

DE 2028240	A1	19701223	DE 1970-2028240 <--	19700609
DE 2028240	C3	19731122		
DE 2028240	B2	19730322		
PRIORITY APPLN. INFO.:			JP 1969-45912 <--	A 19690611
			JP 1969-91184 <--	A 19691115
			JP 1969-104890 <--	A 19691227
			JP 1969-104891 <--	A 19691227
			JP 1969-104892 <--	A 19691227
			JP 1970-27132 <--	A 19700331
			JP 1970-27133 <--	A 19700331

AB Heat-degradation-resistant polyolefin resin moldings are prepared by melt mixing the polyolefin, such as polypropylene [9003-07-0] powder with 0.3% of a glyceride of an alkylthioalkanoic acid (RSCnH2nCO2H; R=C8-30 alkyl group, and n = 2-3), such as C8H17SCH2CH2CO2CH2CH(O2CCH2CH2SC8H1 7)CH2O2CCH2CH2SC8H17 [31716-40-2], or a mixture of 0.1% of a hindered phenol type antioxidant, such as octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate [2082-79-3] and 0.2% of the glyceride before molding.
IT 31716-40-2
RL: USES (Uses)
(polypropylene molding containing, heat-resistant)
RN 31716-40-2 CAPLUS
CN Propanoic acid, 3-(octylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:65007 CAPLUS Full-text
DOCUMENT NUMBER: 74:65007
TITLE: Polyolefin compositions stabilized against thermal decomposition
INVENTOR(S): Onishi, Akiyoshi; Fukuoka, Naohiko
PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd.; Shipro Kasei Kaisha, Ltd.
SOURCE: Ger. Offen., 35 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2028240	C3	19731122			
DE 2028240	B2	19730322			
JP 49023295	B	19740614	JP 1969-104891		19691227
				<--	
JP 49046144	B	19741207	JP 1970-27132		19700331
				<--	
JP 49046145	B	19741207	JP 1970-27133		19700331
				<--	
US 3629194	A	19711221	US 1970-44656		19700608
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PRIORITY APPLN. INFO.:			JP 1969-45912	A	19690611
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			JP 1969-91184	A	19691115
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			JP 1969-104890	A	19691227
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			JP 1969-104891	A	19691227
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			JP 1969-104892	A	19691227
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			JP 1970-104891	A	19691227
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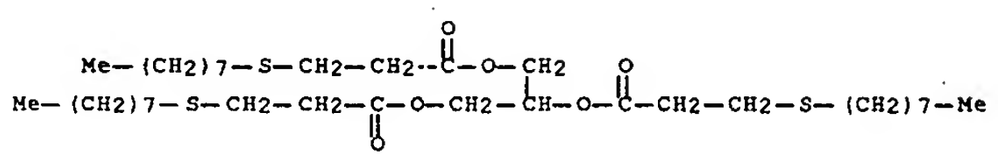
			JP 1970-104892	A	19691227
				<--	

AB Polyolefins are stabilized against thermal decomposition with esters of ω-(alkylthio)alkanoic acids and glycols, thio ether glycols, trimethylolalkanes, glycerol, or pentaerythritol. Thus, isotactic polypropylene powder was combined with a stabilizer, granulated by extrusion, and injection molded into 0.5-mm films, which were aged in an air oven at 140°. The unstabilized polymer became brittle within 3 hr, while compns. containing 0.3 or 0.6% octamethylene bis[3-(dodecylthio)propionate] required 126 and 191 hr, resp., to become brittle. A combination of 0.2% pentaerythritol tetrakis[3-(dodecylthio)propionate] and 0.1% n-octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate stabilized the composition for >3000 hr.

IT 31716-40-2 31716-41-3 31716-42-4
31716-44-6 31716-45-7 31716-46-8
31716-47-9
RL: USES (Uses)
(stabilizers, for propene polymers)

RN 31716-40-2 CAPLUS

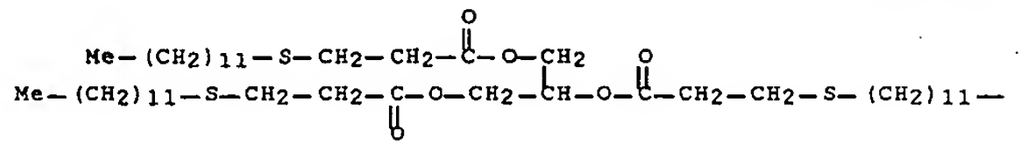
CN Propanoic acid, 3-(octylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



RN 31716-41-3 CAPLUS

CN Propanoic acid, 3-(dodecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



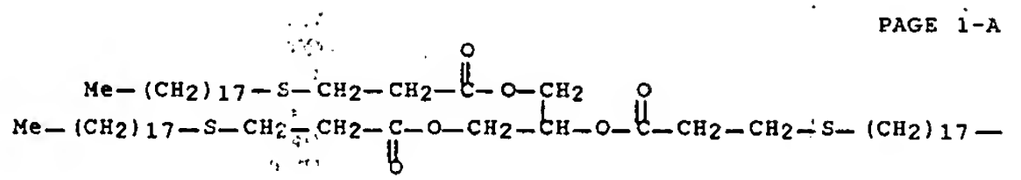
PAGE 1-B

—Me

RN 31716-42-4 CAPLUS

CN Propanoic acid, 3-(octadecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

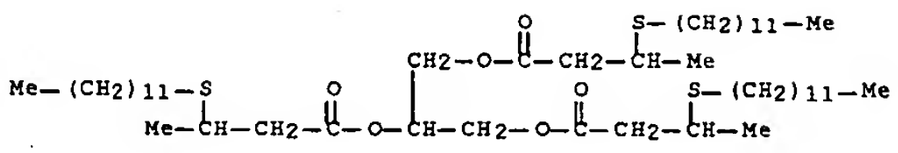


PAGE 1-B

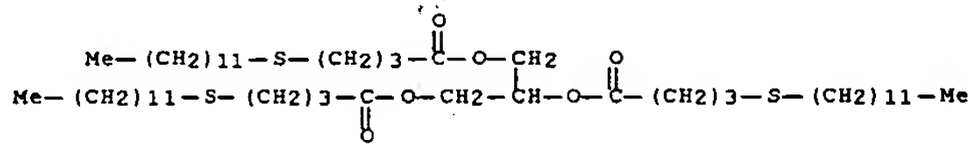
—Me

RN 31716-44-6 CAPLUS

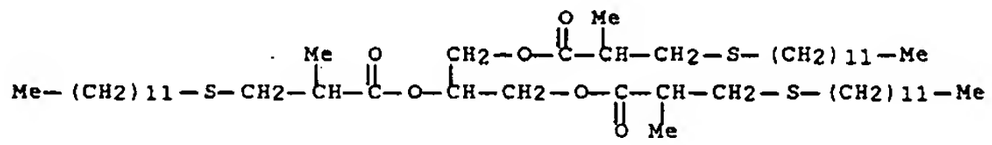
CN Butyric acid, 3-(dodecylthio)-, 1,2,3-propanetriyl ester (8CI) (CA INDEX NAME)



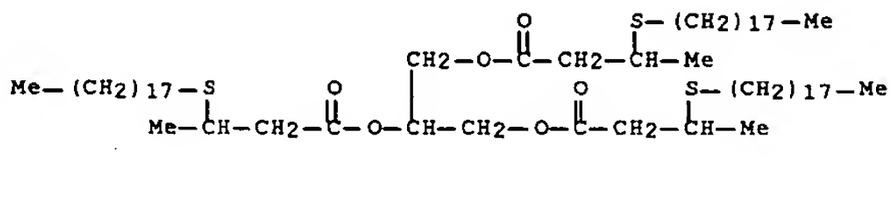
RN 31716-45-7 CAPLUS
CN Butanoic acid, 4-(dodecylthio)-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



RN 31716-46-8 CAPLUS
CN Propionic acid, 3-(dodecylthio)-2-methyl-, 1,2,3-propanetriyl ester (8CI) (CA INDEX NAME)



RN 31716-47-9 CAPLUS
CN Butyric acid, 3-(octadecylthio)-, 1,2,3-propanetriyl ester (8CI) (CA INDEX NAME)



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L17 2 S L5

L17 ANSWER 1 OF 2 CAOLD COPYRIGHT 2007 ACS on STN
AN CA51:15046g CAOLD
TI water utilization and treatment efficiency of Gulf Coast cooling towers
AU Brooke, Maxey; et al.
IT 1656-63-9 10564-67-7 18623-17-1 18819-96-0 18840-99-8
102013-82-1 102899-70-7 103391-13-5 106141-85-9 120580-04-3
121284-76-2 121426-17-3 122649-83-6

L17 ANSWER 2 OF 2 CAOLD COPYRIGHT 2007 ACS on STN
AN CA51:9487h CAOLD
TI promoters for the dropwise condensation of steam - (I) preparation of compds, containing monofunctional S groups, (II) containing polyfunctional S groups, (III) of Si and P compds., (IV) dropwise condensation and testing of compds.
AU Blackman, Lionel C. F.; Dewar, M. J. S.

IT 105-58-8 1608-90-8 1656-63-9 2307-39-3 2885-00-9
3862-18-8 5454-93-3 5455-43-6 5654-68-2 5875-26-3
6250-36-8 6974-31-8 7623-16-7 10564-67-7 13784-72-0
14019-39-7 14484-83-4 15949-84-5 16645-54-8 17908-12-2
18623-17-1 18819-96-0 18821-89-1 18840-98-7 18840-99-8
18845-95-9 20614-09-9 35447-70-2 57528-07-1 66580-34-5
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L18 0 L5

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L19        22599 S "MILLER A"?/AU
L20         2001 S "JORGENSEN M"?/AU
L21         1106 S "BERGE R"?/AU
L22          144 S "SKORVE J"?/AU
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L24           51 S L19 AND (L20 OR L21 OR L22)
L25            2 S L20 AND (L21 OR L22)
L26          115 S L21 AND L22
L27          428 SEA ABB=ON  PLU=ON  (L19-L22 OR L24 OR L26) AND
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                 OR (PHOSPHO OR LYSOPHOSPHO)(W) LIPID? OR CERAMIDE OR
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L29          140 SEA ABB=ON  PLU=ON  (L27 OR L28) AND (SULFUR? OR SULPHUR?
                 OR SULFAT? OR SULPHAT?)
L30           89 S L29 AND (TREAT? OR THERAP? OR PREVENT?)
L31           59 S L29 AND INHIBIT?
L32            3 SEA ABB=ON  PLU=ON  (L30 OR L31) AND (TOPICAL? OR PARENTAL?
                 OR IV OR (I OR INTRA)(W)(V OR VENOUS?) OR INTRA(W)(ABDOMEN
                 OR ABDOMIN? OR PERITONEAL?) OR INTRAPERITONEAL? OR
                 PERITONEAL?)

L33            4 S L23 OR L25 OR L32
L34            3 DUP REM L33 (1 DUPLICATE REMOVED)

L34  ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN  DUPLICATE 1
ACCESSION NUMBER:        2004:2894  CAPLUS  Full-text
DOCUMENT NUMBER:         140:42422
TITLE:                   Preparation of sulfur-containing phospholipid
                         triglyceride derivatives as antidiabetic agents
INVENTOR(S):             Miller, Andrew David; Jorgensen,
                         Michael Rael; Berge, Rolf;
                         Skorve, Jon
PATENT ASSIGNEE(S):      Ic Vec Limited, UK; Thia Medica As
SOURCE:                  PCT Int. Appl., 113 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND  DATE        APPLICATION NO.          DATE
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     WO 2004000854       A1    20031231    WO 2003-GB2582           20030616
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
            LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
            NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
            SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
            ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
     CA 2490121          A1    20031231    CA 2003-2490121          20030616
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     AU 2003278602       A1    20040106    AU 2003-278602           20030616
     EP 1515978          A1    20050323    EP 2003-740736           20030616
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
            PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1675229          A     20050928    CN 2003-817434           20030616
     JP 2005529969       T     20051006    JP 2004-515006           20030616
     NZ 537762           A     20070223    NZ 2003-537762           20030616
     IN 2004CN02846      A     20060210    IN 2004-CN2846           20041215
     NO 2004005562       A     20050217    NO 2004-5562             20041220
     ZA 2005000558       A     20051017    ZA 2005-558              20050120
     US 2006105987       A1    20060518    US 2005-518427           20050930
PRIORITY APPLN. INFO.:                       GB 2002-14267       A  20020620
                                             GB 2002-17506       A  20020729
                                             WO 2003-GB2582      W  20030616

OTHER SOURCE(S):         MARPAT 140:42422
GI
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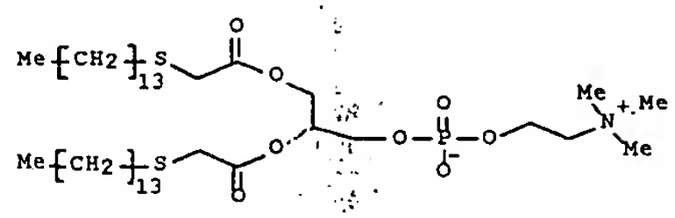

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AB   The present invention provides a lipid compound comprising at least one non-
     polar moiety and a polar moiety, wherein each or at least one non-polar moiety
     is of the formula X-Y-Z-, wherein X is a hydrocarbyl chain, Y is selected from
     at least one of S, Se, SO2, SO, and O, and Z is an optional hydrocarbyl group,
     wherein the polar moiety is of the formula -[C(O)]mPHG, wherein PHG is a polar
     head group, and wherein m is the number of non-polar moieties.  Thus,
     esterified tetradecylthioacetic acid (TTA) phosphatidylcholines (PCs) and
     triacylglycerides (TAGs), e.g. I, were prepared  Effect of esterified and non-
     esterified TTA on palmitoyl-CoA oxidation in rat liver homogenate.  Effect of
     esterified and non-esterified TTA on the mitochondrial carnitine
     palmitoyltransferase-II activity.  Effect of esterified and non-esterified TTA
     on the 3-hydroxy-3-methylglutharyl- CoA synthase activity in rat liver
     homogenate.  Effect of esterified and non-esterified TTA on the fatty acyl-CoA
     oxidase activity in rat liver homogenate.  Effect of esterified and non-
     esterified TTA containing liposomes on plasma lipids in male Wistar rats.  The
     compds. of the present invention (TTA-PC and TTA-TAG) have been demonstrated
     to increase fatty acid oxidation and decrease plasma and hepatic lipid levels.
REFERENCE COUNT:         7     THERE ARE 7 CITED REFERENCES AVAILABLE FOR
                               THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                               RE FORMAT

L34  ANSWER 2 OF 3    MEDLINE on STN
ACCESSION NUMBER:    2001610006     MEDLINE  Full-text
DOCUMENT NUMBER:     PubMed ID: 11684079
TITLE:               Sustained retention of tetradecylthioacetic acid after
                     local delivery reduces angioplasty-induced coronary
                     stenosis in the minipig.
```

AUTHOR: Pettersen R J; Muna Z A; Kuiper K K; Svendsen E; Muller F; Aukrust P; Berge R K; Nordrehaug J E
CORPORATE SOURCE: Department of Heart Disease, Haukeland University Hospital, N-5021, Bergen, Norway.. rpet@haukland.no
SOURCE: Cardiovascular research, (2001 Nov) Vol. 52, No. 2, pp. 306-13.
Journal code: 0077427. ISSN: 0008-6363.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 2 Nov 2001
Last Updated on STN: 25 Jan 2002
Entered Medline: 7 Jan 2002

AB OBJECTIVE: The sulfur containing tetradecylthioacetic acid (TTA) has a profound effect on lipid metabolism and may also exert antioxidant and anti-inflammatory actions and thereby counteract coronary stenosis after angioplasty balloon injury. This study examined the possible modulatory effects of TTA, delivered locally, on coronary stenosis in minipigs and the underlying mechanisms of action. METHODS: Coronary balloon angioplasty injury using an oversized balloon was performed to 40 coronary arteries (20 minipigs, Sus Scrofa, Gammelsroed) followed by delivery of placebo or TTA via a local drug delivery balloon catheter. TTA was radiolabelled in four pigs. Quantitative coronary angiography and intracoronary ultrasound (ICUS) were performed before and after injury, and after 4 weeks of follow-up. The arteries were examined with histomorphometry. The antioxidant and anti-inflammatory effects of TTA were examined on LDL oxidation and stimulated release of interleukin (IL)-2 and IL-10 in human peripheral blood mononuclear cells (PBMC), respectively. RESULTS: Radioactive TTA was present in the coronary wall after 4 weeks. Angiographic minimal luminal diameter (mean+/-S.E.M.) in the placebo and TTA group was 1.3+/-0.1 vs. 2.2+/-0.2 mm (P<0.01) at follow-up, stenosis rate was 55 and 20% (P<0.01). Remodeling was -0.56+/-0.12 in the TTA group and -1.28+/-0.09 in the placebo group (P<0.01). TTA significantly prolonged the lag time of LDL oxidation. In phytohemagglutinin stimulated PBMC, TTA significantly decreased IL-2 levels and increased IL-10 levels suggesting a marked anti-inflammatory net effect. CONCLUSIONS: Local delivery of TTA reduces coronary artery stenosis after PTCA as assessed by both angiographic, histomorphometric and ICUS examinations by influencing vessel remodeling rather than intimal hyperplasia. The underlying mechanism(s) seem to involve antioxidant and anti-inflammatory effects of this fatty acid analogue.

L34 ANSWER 3 OF 3 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-126358 [11] WPIX
CROSS REFERENCE: 2000-038952; 2000-096828; 2000-105537
DOC. NO. CPI: C2000-038393 [11]
TITLE: Use of fatty acid analogues, for treatment and/or prevention of obesity, fatty liver and hypertension
DERWENT CLASS: B05; C03
INVENTOR: BERGE R; CAPROTTI R; DAVIES B W; DILWORTH B
PATENT ASSIGNEE: (ESSO-C) EXXON CHEM PATENTS INC; (THIA-N) THIA MEDICA AS
COUNTRY COUNT: 85

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9958121	A1	19991118	(200011)*	EN	65[8]	
AU 9949366	A	19991129	(200018)	EN		
EP 1075258	A1	20010214	(200111)	EN		
BR 9910296	A	20020115	(200214)	PT		
JP 2002514594	W	20020521	(200236)	JA	55	
US 6441036	B1	20020827	(200259)	EN		
EP 1285652	A1	20030226	(200319)	EN		
EP 1284139	A1	20030219	(200321)	EN		
AU 762792	B	20030703	(200354)	EN		
EP 1075258	B1	20030820	(200356)	EN		
NZ 508045	A	20030829	(200365)	EN		
RU 2219920	C2	20031227	(200413)	RU		
ES 2207253	T3	20040516	(200434)	ES		
EP 1285652	B1	20060816	(200655)	EN		
DE 69932645	E	20060914	(200661)	DE		
DE 69932864	E	20060928	(200667)	DE		

APPLICATION DETAILS:

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AU 9949366 A		AU 1999-49366	19990423
AU 762792 B		AU 1999-49366	19990423
BR 9910296 A		BR 1999-10296	19990423
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EP 1075258 B1		EP 1999-933292	19990423
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RU 2219920 C2		WO 1999-NO135	19990423
JP 2002514594 W		JP 2000-547972	19990423
RU 2219920 C2		RU 2000-131222	19990423
US 6441036 B1		US 2001-700061	20010127
EP 1284139 A1		EP 2002-24388	19990423
EP 1075258 B1	Related to	EP 2002-24388	19990423
DE 69932645 E		EP 2002-24388	19990423
EP 1285652 A1		EP 2002-24616	19990423
EP 1075258 B1	Related to	EP 2002-24616	19990423
EP 1285652 B1		EP 2002-24616	19990423
DE 69932864 E		DE 1999-632864	19990423
DE 69932864 E		EP 2002-24616	19990423

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 762792	B	Previous Publ	AU 9949366	A
EP 1285652	A1	Div ex	EP 1075258	A

EP 1284139	A1	Div ex	EP 1075258	A
ES 2207253	T3	Based on	EP 1075258	A
EP 1285652	B1	Div ex	EP 1075258	A
EP 1075258	B1	Related to	EP 1284139	A
DE 69932645	E	Based on	EP 1284139	A
EP 1075258	B1	Related to	EP 1285652	A
AU 9949366	A	Based on	WO 9958121	A
EP 1075258	A1	Based on	WO 9958121	A
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RU 2219920	C2	Based on	WO 9958121	A
JP 2002514594	W	Based on	WO 9958121	A1
DE 69932864	E	Based on	EP 1285652	A

PRIORITY APPLN. INFO: WO 1998-NO143 19980508
AN 2000-126358 [11] WPIX
CR 2000-038952; 2000-096828; 2000-105537
AB WO 1999058121 A1 UPAB: 20060115
NOVELTY - Novel fatty acid analogues (I), their salts, prodrugs or complexes are used for the preparation of pharmaceutical compositions.
DETAILED DESCRIPTION - The fatty acid analogues of formula (I), their salts, prodrugs or complexes are used for the preparation of pharmaceutical compositions.
CH3-(CH2)m-(Xi-CH2)n-COOR (I) n = 1-12;
m = 0-23;
i = odd number, which indicates the position of COOR; Xi = O, S, SO, SO2, Se or CH2; provided at least one Xi is not CH2; and
R = H or 1-4C alkyl.
INDEPENDENT CLAIMS are also included for: (i) novel fatty acid analogues (I); (ii) the method of modifying fat distribution and content of animals, and hence to improve the quality of meat, milk and eggs. The method involves adding a feed product comprising the fatty acid analogues (I) to the diet of animals. ACTIVITY - Hypotensive (claimed); Anorectic (claimed). Male obese Zucker fa/fa rats weighing 100 g are acclimatized for at least one week to 20+/-3 degreesC. Test sample tetradecylthioacetic acid (TTA) and control sample palmitic acid are suspended in 0.5% (w/v) carboxymethyl cellulose. Two groups consisting of six animals each are administered with a control and test sample at a dosage of 300 mg/day/kg body weight, by gastric intubation once daily for 10 days. The blood and organs are collected after sacrificing the rats and the lipid concentration in plasma is determined. The results showed that the decrease in level of triglycerides, cholesterol and phospholipids in plasma are 72%, 73% and 71%, respectively when compared to control.
MECHANISM OF ACTION - The compound (I) increases the mitochondrial fatty acid oxidation (beta oxidation) and reduces the availability of fatty acid for esterification. Thus the compound modifies the composition of the lipids in various tissues.
USE - For treatment and/or prevention of multi metabolic syndrome such as hyperinsulinemia, insulin resistance, obesity, glucose intolerance, type 2 diabetes mellitus, dyslipidemia and/or hypertension (all claimed).
ADVANTAGE - The synthesis of triacylglycerol and cholesterol is reduced and secretion of very low density lipoprotein (VLDL) from the liver is decreased. The compound is also reduces the production of low density lipoprotein (LDL). Tetradecylthioacetic acid (TTA) is found to decrease hyperinsulinemia and improve insulin action on glucose utilization without increasing the body weight.

Member(0003)
ABEQ EP 1075258 A1 UPAB 20060115
NOVELTY - Novel fatty acid analogues (I), their salts, prodrugs or complexes are used for the preparation of pharmaceutical compositions.
DETAILED DESCRIPTION - The fatty acid analogues of formula (I), their salts, prodrugs or complexes are used for the preparation of pharmaceutical compositions.
CH3-(CH2)m-(Xi-CH2)n-COOR (I)
n = 1-12;
m = 0-23;
i = odd number, which indicates the position of COOR;
Xi = O, S, SO, SO2, Se or CH2; provided at least one Xi is not CH2; and
R = H or 1-4C alkyl.
INDEPENDENT CLAIMS are also included for:
(i) novel fatty acid analogues (I);
(ii) the method of modifying fat distribution and content of animals, and hence to improve the quality of meat, milk and eggs. The method involves adding a feed product comprising the fatty acid analogues (I) to the diet of animals.
ACTIVITY - Hypotensive (claimed); Anorectic (claimed).
Male obese Zucker fa/fa rats weighing 100 g are acclimatized for at least one week to 20+/-3 degreesC. Test sample tetradecylthioacetic acid (TTA) and control sample palmitic acid are suspended in 0.5% (w/v) carboxymethyl cellulose. Two groups consisting of six animals each are administered with a control and test sample at a dosage of 300 mg/day/kg body weight, by gastric intubation once daily for 10 days. The blood and organs are collected after sacrificing the rats and the lipid concentration in plasma is determined. The results showed that the decrease in level of triglycerides, cholesterol and phospholipids in plasma are 72%, 73% and 71%, respectively when compared to control.
MECHANISM OF ACTION - The compound (I) increases the mitochondrial fatty acid oxidation (beta oxidation) and reduces the availability of fatty acid for esterification. Thus the compound modifies the composition of the lipids in various tissues.
USE - For treatment and/or prevention of multi metabolic syndrome such as hyperinsulinemia, insulin resistance, obesity, glucose intolerance, type 2 diabetes mellitus, dyslipidemia and/or hypertension (all claimed).
ADVANTAGE - The synthesis of triacylglycerol and cholesterol is reduced and secretion of very low density lipoprotein (VLDL) from the liver is decreased. The compound is also reduces the production of low density lipoprotein (LDL). Tetradecylthioacetic acid (TTA) is found to decrease hyperinsulinemia and improve insulin action on glucose utilization without increasing the body weight.

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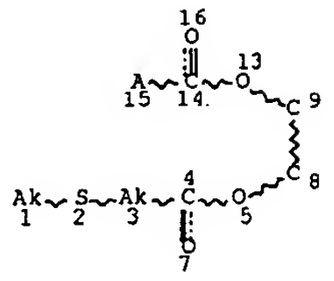

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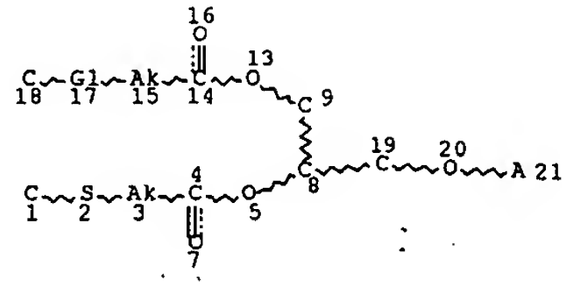

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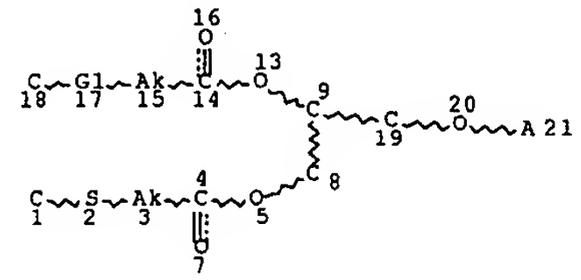

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STEREO ATTRIBUTES: NONE
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L3 STR
L4 STR
L5 109 SEA SUB=L2 SSS FUL (L3 OR L4)

L6 41 SEA ABB=ON PLU=ON L5 AND P=>1

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DEL SEL Y
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                LIPID? OR (PHOSPHO OR LYSOPHOSPHO)(W) LIPID? OR CERAMIDE
                OR MONACYLGLYCEROL OR TRIACYLGLYCEROL OR DIACYLGLYCEROL OR
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                LINK?(W)(HG OR HEAD GROUP))
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                OR SULFAT? OR SULPHAT?)
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L31          59 SEA ABB=ON  PLU=ON  L29 AND INHIBIT?
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                 OR IV OR (I OR INTRA)(W)(V OR VENOUS?) OR INTRA(W)(ABDOMEN
                 OR ABDOMIN? OR PERITONEAL?) OR INTRAPERITONEAL? OR
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     DICTIONARY FILE UPDATES:  21 JUN 2007  HIGHEST RN 938223-21-3

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     TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006
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     FILE CAPLUS

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     Effective October 17, 2005, revised CAS Information Use Policies apply
     They are available for your review at:

     http://www.cas.org/infopolicy.html

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     FILE COVERS 1907-1966
     FILE LAST UPDATED:  01 May 1997 (19970501/UP)

       This file contains CAS Registry Numbers for easy and accurate
       substance identification.  Title keywords, authors, patent
       assignees, and patent information, e.g., patent numbers, are
       now searchable from 1907-1966.  TIFF images of CA abstracts
       printed between 1907-1966 are available in the PAGE
       display formats.

       New CAS Information Use Policies, enter HELP USAGETERMS for details.

       This file supports REGistRY for direct browsing and searching of
       all substance data from the REGISTRY file.  Enter HELP FIRST for
       more information.

     FILE MEDLINE
      FILE LAST UPDATED: 21 Jun 2007 (20070621/UP).  FILE COVERS 1950 TO DA

       This file contains CAS Registry Numbers for easy and accurate
       substance identification.

     FILE BIOSIS
     FILE COVERS 1926 TO DATE.
     CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
     FROM JANUARY 1926 TO DATE.

     RECORDS LAST ADDED: 20 June 2007 (20070620/ED)
```

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE EMBASE
FILE COVERS 1974 TO 22 Jun 2007 (20070622/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX
FILE LAST UPDATED: 20 JUN 2007 <20070620/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200739 <200739/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> New reloaded DWPI Learn File (LWPI) available as well <<<

>>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<

>>> New display format FRAGHITSTR available <<<
SEE ONLINE NEWS and
http://www.stn-international.de/archive/stn_online_news/fraghitstr_ex.

>>> IPC Reform backfile reclassification has been loaded to 31 May 2007. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC and 20060601/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html a
http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
PLEASE SEE
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<

FILE JAPIO
FILE LAST UPDATED: 19 JUN 2007 <20070619/UP>
FILE COVERS APRIL 1973 TO FEBRUARY 22, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE PASCAL
FILE LAST UPDATED: 18 JUN 2007 <20070618/UP>
FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE
IN THE BASIC INDEX (/BI) FIELD <<<

FILE DISSABS
FILE COVERS 1861 TO 25 MAY 2007 (20070525/ED)

FILE HOME